ACTIVE ENGAGEMENT IN A PROFESSIONAL LEARNING COMMUNITY TO INFLUENCE TEACHER COMPETENCY AND SELF-EFFICACY TOWARDS MEDIA LITERACY INSTRUCTION

by

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Abstract

The incorporation of media literacy into a teacher's curriculum is important because it provides students with opportunities to actively engage with information and critically evaluate it, skepticism and ability to understand the purpose, audience, and subject of messages. However, teachers' perceived feelings of self-efficacy, competency, and motivation may affect the adoption of educational innovations such as media literacy. Based on data collected from a high school in Northern Virginia, an intervention was designed to support teachers through a professional learning community to increase competency and self-efficacy with media literacy and develop collegial relationships vital for sustained support and professional collaboration. Deductive coding of qualitative data and statistical analysis of quantitative data indicated that time for teachers to collaborate with peers and observe examples of media-literacy implementation for instruction improved levels of self-efficacy with media literacy and led to positive attitudes toward media-literacy implementation and confidence regarding its use for instruction.

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Dedication

I would like to dedicate this work to my parents, Victor and Linda Cameron. You both are unwavering sources of support and love. You have been the best parents a child could wish for, and I hope to always make you proud. “Illegitimi non carborundum.”

I also dedicate this work to my husband Chris, for talking me down off the ledge many times and pouring me bourbon when things were at their worst and for giving me the space and time to complete this work and always reassuring me that I was going to finish. I love you forever.

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Executive Summary

Background

People are more likely to accept and believe fake news and news destructive to society if they are unable to interpret and evaluate its message (Hobbs, 2017c). Students have struggled not only with separating fake news from real news but also with understanding and vetting their information and sources (Hobbs, 2017c). The Stanford History Education Group (2016) investigated students at the middle school and high school level (N = 7,804) in 12 states and analyzed their ability to analyze and evaluate the validity of news content. The researchers reported that even though students were dexterous at finding information on the Internet, they were confused by how to evaluate information, especially advertisements. Students found native advertising (an advertisement that is included on a website as a news story but is actually an attempt to sell a product) especially confusing. The Stanford History Education Group studied 203 middle school students, and 80% of them believed that a native advertisement was a real news story. Students reported confusion over the concept of sponsored content and tended to interpret it as true (Stanford History Education Group, 2016). Additionally, the researchers asked 170 high school students about the validity of a post that showed a picture of daisies with a caption that stated flowers had "nuclear birth defects" (Stanford History Education Group, 2016, p. 17) stemming from the nuclear effects of Japan's Fukushima Daiichi. Students were only provided with the picture and the caption: Fewer than 20% of students questioned the source and validity of the post, but 40% interpreted the post to be true and valid because "it presented pictorial evidence about conditions near the power plant" (Stanford History Education Group, 2016, p. 17).

These examples illustrate why the definition of literacy for students needs to extend to not only identifying parts of speech and correct punctuation, but also how to identify the reliability of sources and their biases (Gretter & Yadav, 2016). Critical thinking through evaluation of sources requires students to think about where the content originated, who wrote it, and its message, purpose, and audience. When schools establish firewalls and other methods to protect students against inappropriate content, they do a disservice to students by not giving them the tools to understand and evaluate information they view on their own outside of school on YouTube, Facebook, Instagram, Twitter, and other social media outlets (November, 2016). Critical thinking to evaluate media messages and credibility is important and equips students with the skills to critically evaluate images that advertisers use to sell products. Media are not limited to words but also include a range of images that can negatively impact students. However, providing students with opportunities to evaluate these messages depends on teachers being able to instruct with competency and knowledge of media literacy.

The Problem

Teachers' beliefs, attitudes, competency, and perceived feelings of self-efficacy influence their propensity to implement media literacy for instruction. Results from a 2017 needs assessment at Appleton High School[1], where this study took place, indicated that although teachers were interested in implementing digital tools for media literacy, they were concerned about technology distracting students in the classroom. Data from the needs assessment suggested that teachers were not using media and technology in the classroom to develop students' higher order skills such as analysis, synthesis, and critical

[1] Pseudonym.

thinking. Instead, they were using it to support lower order skills such as remembering and understanding information (Bloom, 1956; Churches, 2008). Teachers indicated a perceived need for more support to develop instructional skills with media literacy. Although many teachers had an interest in incorporating media literacy for instruction, they perceived a lack of professional development to support teachers as learners and provide structure and guidance on how technology could be implemented for media-literacy instruction.

The Intervention

Professional development that supports teachers to implement media literacy incorporates opportunities for face-to-face meetings, guided exploration of digital tools, and institutional support to allow time for teachers to train and learn (Ranieri, Bruni, & de Xivry, 2018). The main purpose of the study was to develop a professional learning community (PLC) for secondary teachers that allowed time for teachers to develop competency and improve self-efficacy regarding media-literacy implementation and develop collegial relationships that were supportive and sustaining. The intervention supported six secondary teachers in a PLC over a period of three months. I presented teachers with opportunities to learn about media literacy for instruction and provided time to participate in hands-on activities and engage in discussions regarding instruction and implementation. This mixed-methods study followed a single subject pretest–posttest embedded design (Creswell & Plano Clark, 2011).

Findings

Findings indicated that self-efficacy with media literacy improved through opportunities to collaborate with peers and observe examples of media-literacy

implementation for instruction. Quantitative survey data for self-efficacy, competency, and beliefs and attitudes revealed only minor changes, however, qualitative data collected through interviews and exit tickets suggested that teachers were more positive about media-literacy implementation and felt confident in its use for instruction. Additionally, teachers felt positively influenced by their peers and appreciated worked examples to reduce cognitive load and permit easy assimilation into classroom use (Ayres & Paas, 2012).

The results suggested that opportunities for teachers to engage in constructivist learning are beneficial for implementation of media literacy (Hobbs, 2010). Teachers engaged in hands-on learning experiences and also provided collegial support through pair and group work. Participants assessed the PLC meetings positively and indicated that the opportunity to share ideas and observe each other positively influenced their feelings about implementing media-literacy into their instruction. Professional development within a PLC allowed opportunities for vicarious learning, and mastery through observation, and hands-on activity, scaffolded support, and reflection (Bandura, 1977; Ranieri et al., 2018; Vygotsky, 1978).

Chapter 1

Media Literacy in Education

Media literacy as a problem of practice has provided many challenges regarding a precise definition with which to frame research. Media literacy is not only the ability to interact with and comprehend messages received but also the ability to use media to develop messages to influence surrounding society (RobbGrieco & Hobbs, 2013). It is critical for students to have media-literacy skills to navigate the media they encounter daily. According to Luft (2016), students spent 8 hours per day consuming media but only 30–40 minutes reading. Students need appropriate tools to determine credibility of media sources. If students are unable to make decisions about information in the media, then the media are at liberty to make decisions for them (Küter-Luks, Heuvelman, & Peters, 2011). Students who are unable to interpret and evaluate messages are more likely to accept and believe fake news and news that can be destructive to society (Hobbs, 2017c). Students have struggled not only with separating fake news from real news but also with fully understanding and vetting their information and sources (Hobbs, 2017c).

Bulger and Davison (2018) referred to the basis of media literacy as "the interpretive responsibilities of the individual" (p. 3). However, each individual may interpret and understand his or her media-literacy responsibility in different ways. The National Association for Media Literacy Education (NAMLE, 2007) defined the purpose of media-literacy education as "help[ing] individuals of all ages develop the habits of inquiry and skills of expression that they need to be critical thinkers, effective communicators and active citizens in today's world" (p. 1). Even though this definition provides clear guidelines for media literacy's purpose and the relevant competencies of a

media literate individual, the definition of media literacy can also be flexible and specific to the person. According to Sur, Unal, and Iseri (2014), "media literacy has many definitions. It has different modes, is relative, and depends on the person. Audience-oriented, it changes according to the conscious and the known. Nobody is completely media literate" (p. 120). In 1978, Minkkinem provided the first organized definition for media literacy: "Media literacy aims to improve skills in cognitive, ethical, philosophical, and aesthetic issues" (Minkkinem, as cited in Recepoğlu & Ergün, 2013, p. 64). However, interest in media literacy, specifically the awareness of propaganda, dates back to the 1930s and 1940s when writers and scholars became interested in the power of language and its impact on society. Korzybski (1933) wrote about language symbolism and its effects on human awareness and society. In 1937, Clyde Miller cofounded the Institute for Propaganda Analysis and the efforts of the institute, with help from others, led to the distribution of information regarding propaganda to approximately 1,000,000 students (RobbGrieco & Hobbs, 2013).

Dewey's (1897/1974) constructivist actions approach to create meaning influenced media literacy, specifically empowerment and engagement in democratic discourse. More recently, Freire (1970/2015) stated that "to no longer be prey to its force [oppression], one must emerge from it and turn upon it. This can be done only by means of the praxis: reflection and action upon the world in order to transform it" (p. 51). Freire implored people to critically analyze, and be active participants in, the world around them, especially through awareness and understanding of oppression and texts meant to subjugate and silence. Democracy requires active inquiry and communication to develop critical consciousness.

Although other countries, including the United Kingdom, Canada, and Australia, have included media literacy as part of their standards of learning for decades, the United States did not include it until the early 1990s (Stein & Prewett, 2009). Five specific competencies related to media literacy include (a) access to information; (b) utilization of tools for message production; (c) creativity, to generate content that acknowledges message purpose, audience, and point of view; (d) reflection, to include ethics and responsibility related to media and communication; and (e) action with media to engage in societal issues to impact awareness, engagement, and democracy (Hobbs, 2017b). At the time of writing, all 50 states had incorporated media literacy skills into their curriculum standards (University of Florida, 2018).

Media-literacy education is essential because it develops students as active participants in how they process, understand, and facilitate inquiry regarding media (Hobbs, 2010). Students educated in media literacy develop a healthy skepticism and ability to understand the purpose, audience, and subject of messages (RobbGrieco & Hobbs, 2013). Media-literacy education also gives students opportunities to develop the necessary critical thinking skills to construct meaning from the media they encounter daily (Considine, Horton, & Moorman, 2009). Jeong, Cho, and Hwang (2012) conducted a meta-analysis of media literacy interventions and found that the majority of interventions focused on outcomes related to critical thinking rather than behavioral change. NAMLE (2007) supported critical thinking as a component of media literacy because students become actively involved by "asking questions about *all* media messages, not just those with which we may disagree" (p. 3). Additionally, Hobbs and Jensen (2009) defined media literacy as "active inquiry and critical thinking about the

messages we receive and create" (p. 7). Critical thinking to make sense of media, as part of the framework for 21st-century skills, is the ability to analyze information as well as adapt and creatively apply it to different situations (Partnership for 21st Century Learning, 2015). Critical thinking also includes the ability to challenge ideas and assumptions and reflect on ideas and information for analysis and evaluation (Radeloff & Bergman, 2009). Although students might be inquisitive, they are not naturally inclined to think critically (Snyder & Snyder, 2008). Therefore, the development of media literacy skills in students depends on teachers understanding the purpose of these skills and providing instructional opportunities for learning. However, incorporating media literacy into classroom instruction has proved challenging for teachers (Gretter & Yadav, 2016).

Problem of Practice

The rapidly changing workforce has required students who are active and aware, adaptable to change, and creative and critical thinkers in the world beyond a standardized test (Gretter & Yadav, 2016; Hobbs, 2010; Zhao, 2015). Students need to develop media literacy knowledge and skills to access information and utilize digital tools, create media messages that promote awareness and active engagement in society, and reflect on ethics and responsibility related to media and communication. Additionally, critical-thinking skills (i.e., problem-solving, understanding multiple perspectives, analyzing data to inform decisions, and synthesizing and evaluating information) are necessary for students to understand media messages both sent and received (Beach, 2012; Bruce, 2008; Chen, 2008; Hobbs, 2017b; NAMLE, 2007). Even though researchers have suggested that media literacy supports students in the evaluation of sources to build knowledge about media messages, instructional opportunities for student exploration and inquiry with

media have not been consistently implemented in the classroom (Babad, Peer, & Hobbs, 2012; Dewey, 1897/1974; Hobbs, 2010; November, 2016; Potter, 2004). The integration of media-literacy-focused instruction into the classroom has been affected by multiple factors, including standardized testing; motivation, perception, and preparedness of teachers; and technology use.

Factors Associated with Media-Literacy Education

My review of the literature highlighted several factors that have contributed to the problem of practice. NAMLE (2007) provided six core principles that outline the basis for media-literacy education:

1. Media-literacy education relies on critical thinking and inquiry about messages sent and received.
2. Media-literacy education develops the tenets of literacy to include different aspects of media and not just writing and reading.
3. Media-literacy education develops and strengthens skills for learners through integration and continued inclusion in varied content areas and environments.
4. Media-literacy education develops participant awareness and engagement, which are necessary for democracy.
5. Media-literacy education recognizes that media are a part of the surrounding culture and aid in social connections.
6. Media-literacy education asserts that people use their personal skill sets, ideas, and understanding to develop their definitions from media.

The following sections discuss how factors identified in the literature represent barriers or challenges to implementing or meeting NAMLE's (2007) principles. The concept map in Figure 1 summarizes these factors.

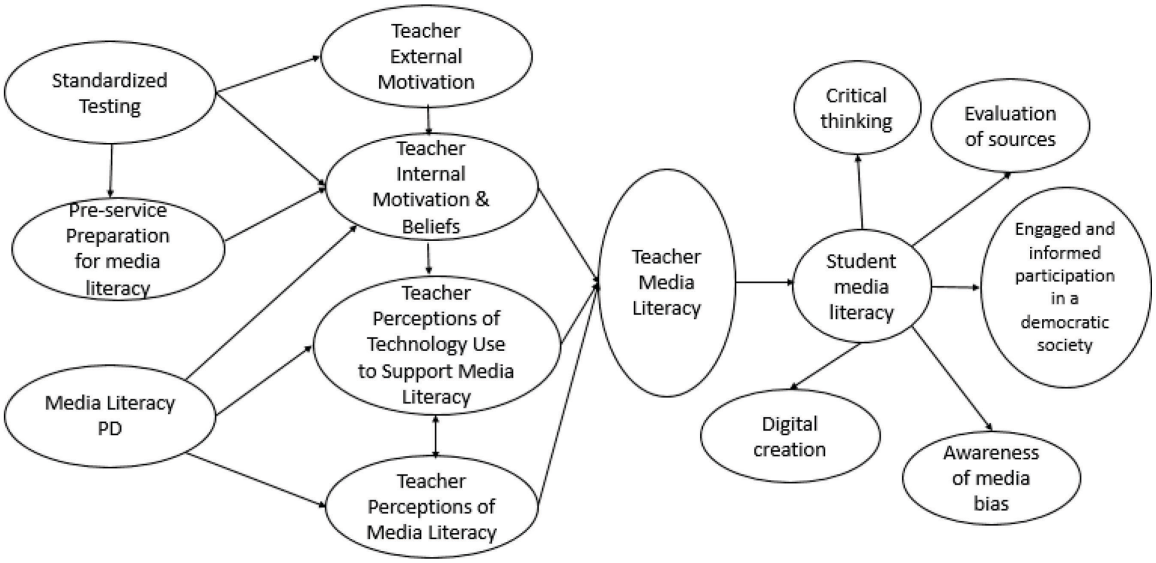

Figure 1. Concept map of factors influencing implementation of media-literacy education.

Media Literacy in a Standardized Testing Culture

School districts have consistently marginalized media-literacy skills because they have been in direct competition with test preparation (Zhao, 2015). In 2002, the federal government's No Child Left Behind policy called for the implementation of annual yearly progress assessments to ensure that schools in all states were reaching benchmarks of learning (O'Donnell, Pruyn, & Chavez, 2004). Consequently, for many schools around the country, passing standardized tests became—and has continued to be—the primary goal; this has contributed to a test-driven culture concerned with marks on a test instead of developing necessary media-literacy skills in students (Groen, 2012). Standardized tests have relied on a multiple-choice format requiring lower order thinking skills, such as remembering and understanding information, rather than incentivizing the development

of higher order thinking skills, such as analysis and synthesis (Bloom, 1956). NAMLE (2007) established that media-literacy education relies on opportunities for inquiry, active engagement, and critical thinking about messages that are sent and received. Standardized tests have focused primarily on recalling information and have not promoted opportunities for students to engage with media literacy or instruction using project-based learning or creative expression (Redmond, 2012).

Standardized tests have also limited creativity and autonomy, because teachers have sometimes felt obligated to address the requirements of the test (Friesem, 2016; Weninger, Hu, & Choo, 2017). For example, in Virginia, 11th-grade students have been required to pass an end-of-course standard-of-learning (SOL) English exam to graduate high school (Strauss, 2014). The Virginia Department of Education (VDOE, 2010) outlined the student skills, knowledge, and understanding necessary to pass the SOLs in its *English Standards of Learning: Curriculum Framework*. The framework combined media literacy with speaking and listening benchmarks for students, instead of including it in its own category. Speaking, listening, and media literacy were under the umbrella of communication skills (VDOE, 2010).

Moreover, the VDOE (2010) listed focus statements for each grade level of English pertaining to speaking, listening, and media literacy, including a description relating to communication. For the ninth-grade level it focused on "interpersonal communication skills" (VDOE, 2010, p. 5); for the 10th-grade level it focused on developing "skilled communicators" (VDOE, 2010, p. 32); for the 11th-grade level it called for further development of "oral communication" (VDOE, 2010, p. 53), and for the 12th-grade level, although it did not include the word *communication*, it specifically

focused on students using "verbal and nonverbal presentation skills to deliver an effective final presentation" (VDOE, 2010, p. 77). Folding media literacy into communication and then using focus statements to define these skills as various elements of communication provided additional guidance and messages on what teachers should focus on in their classrooms (VDOE, 2010).

It was evident from VDOE (2013) that media literacy was not a part of the SOL and that teachers may not feel obligated to teach media literacy to their students. The answer to the frequently asked question, "Will the communications standards be tested?" (VDOE, 2013, p. P) was, "Communication standards will not appear on the SOL assessments" (VDOE, 2013, p. P). Another question was, "What persuasive techniques should be focused on in media?" (VDOE, 2013, p. P). The answer given was, "Examples of persuasive techniques in media literacy can be found in the grade 11 curriculum framework" (VDOE, 2013, p. P). Because it was apparent that communication standards would not be featured on the SOL, investigating persuasive techniques using media would not seem necessary. In Communication Standards 11.1 and 11.2, regarding speaking, listening, and media literacy, students were asked to use persuasive techniques relating to presentation skills to support a position through a process of gathering evidence, constructing counterclaims, and using presentation technology (VDOE, 2010, p. P). However, these same skills were featured in the 11th-grade writing standards. In Communication Standard 11.6, students were asked to write in "a variety of forms with an emphasis on persuasion" (VDOE, 2010, p. P). Students were asked to "generate, gather, plan, and organize ideas for writing to address a specific audience and purpose" (VDOE, 2010, p. P) and "use computer technology to plan, draft, revise, edit, and publish

writing" (VDOE, 2010, p. P). If teachers knew that communication skills would not be tested and that presentation skills could be covered under the guise of another standard, they might not view the inclusion of media literacy for instructional purposes as a good use of time.

The next section discusses further the connection between high-stakes testing and the external motivation to include media literacy in education. Although many teachers have showed interest in media literacy for classroom instruction, beliefs and attitudes about its use for instruction have presented barriers to its implementation (Schmidt, 2012).

Teacher External Motivation

Because of the influence of high-stakes testing and the fear associated with not making annual yearly progress, educators have commonly relied on rapid knowledge attainment and "drill and kill" (Lowther, Ross, & Morrison, 2003, p. 37) practices for test preparation as the basis for classroom instruction and student learning. Motivation to apply media literacy has directly conflicted with preparation for high-stakes testing. For example, Weninger et al. (2017) studied the inclusion of media literacy in English at a secondary school in Singapore. In Singapore schools, teachers at the 11th- and 12th-grade levels prepared students for the Singapore-Cambridge-O-level exams. Teachers in the study involved in preparing students for test preparation were less inclined to engage with media literacy because they were focused on helping students pass the exams. Teachers in ninth and 10th grades felt that the absence of intense exam preparation gave them more flexibility and allowed them to engage with aspects of media literacy. Weninger et al. found that teachers with less constrictive testing requirements embraced "pedagogical

innovation" (Weninger et al., 2017, p. 435) to include creative teaching tactics and learning activities.

Weninger et al. (2017) also reported that teachers in the upper secondary years viewed lower secondary teachers' actions as risky because they usurped time that could be spent strengthening skill sets needed for future exams. A focus on test preparation contributed to teachers' unfavorable attitudes toward the use of media literacy. Weninger et al. additionally pointed out that the existing exam format had not motivated teachers in the study to use media literacy. Teachers at the upper secondary levels had not included media literacy because they knew that the format of the exam would be pen-and-paper, and these same teachers reported that the exam focused on "traditional conceptualization" (Weninger et al., 2017, p. 435). Teachers, therefore, tended to teach in traditional ways because of their perceptions of the exam requirements. According to Tan and Guo (2009), if the alignment between curriculum and assessment is weak, the types of assessments in place may affect the possibility of using innovative teaching strategies. When teachers knew that the format of the exam and subsequent questions would not include media, they tended not to utilize learning opportunities that included it. Teacher motivation to use media literacy in the classroom has proved difficult to find when the climate of the school has promoted scores over skills and knowledge attained through the use of media literacy is misaligned with exam format (Chen, 2008).

Belova and Eilks (2015) examined external motivation in a study in which 12 German science teachers provided their opinions on using media literacy as a way to analyze advertisements that promoted scientific elements. Although the teachers acknowledged the importance of media literacy education to provide students with an

awareness of products and a scientific approach to critically analyzing information, they also admitted that they lacked the time to implement curricula to support media literacy and felt pressured to teach the established requirements of their content area. The teachers indicated a willingness to include media literacy as a complement of the science curriculum, but only if time allowed. Belova and Eilks reported that an additional external factor was the lack of teaching materials for media literacy, and that teachers felt time focused on gathering materials would usurp time from more important content-related tasks. Although the researchers recognized these factors, they also suggested that teachers must "remember that content knowledge alone is never enough to satisfy the curricular requirements for our pupils' learning success" (Belova & Eilks, 2015, p. 1247) and that students needed opportunities to develop the skills of communication, critical thinking, argumentation, persuasion, and evaluation that could be established through regular use of media literacy.

Teacher Internal Motivation, Beliefs, and Attitudes

Motivation to apply media literacy is a function not only of external factors but also teacher beliefs and attitudes. Teacher beliefs are critical for the adoption of an educational innovation such as media literacy (Girvan, Conneely, & Tangney, 2016). If teachers perceive an instructional innovation as beneficial for their classroom context and student learning, they are more likely to have a positive attitude and motivation to adopt the innovation for instruction (Albirini, 2006). Teacher beliefs influence instructional practice and the classroom environment (McTavish & Filipenko, 2016). Teacher knowledge and beliefs act as "a lens through which they view their practices. This lens can serve to facilitate or hinder teachers' efforts as they set about altering their actions in

the classroom" (McTavish & Filipenko, 2016, p. 74). Hobbs and Tuzel (2015) found that teacher attitudes regarding the place of media within the content area contributed to their motivation to use media literacy. Hobbs and Tuzel studied almost 3,000 Turkish teachers and what motivated them to use media literacy in their classrooms. Their results showed that use of media literacy depended directly on teacher content areas and beliefs about how media literacy could be used for learning. Hobbs and Tuzel reported that teachers who did confirm their use of media literacy were from information and communication elective classes. The researchers also suggested that a more interdisciplinary approach could advance the study of media literacy and support its integration into every content area. As NAMLE (2007) stated, media literacy relies on the integration of skills through "interactive and repeated practice" (para. 4) within varying content areas. NAMLE (2007) expanded on this idea by stating that media literacy "requires more than a single event, class, day or even week-long intervention" (p. 5) and "engages students with varied learning styles" (p. 5). If teachers have limited their use of media literacy to offered electives, then media-literacy skills will only have been imparted to a limited number of students, even though analysis, evaluation, and awareness of media has been required of all students (Considine, 2002).

Zhang, Zhu, and Sang (2014) also studied beliefs and motivation in research on stages of concern for teachers regarding the integration of media-literacy education. The researchers studied 392 primary school teachers in Beijing, China who believed media literacy was important for instruction because of its prominence in society and culture but who also held concerns regarding how instruction could be changed to mediate these effects. Zhang et al. noted that media-literacy education was not part of the national

curriculum for China. However, media literacy had been explored in experimental courses in individual schools. Because China considered media literacy as an educational innovation, the researchers had an opportunity to evaluate teachers' stages of concern regarding its implementation:

- Stage 0 was awareness, with teacher lack of concern regarding the innovation;
- Stage 1 was informational, with teacher interest in attaining more information about the innovation;
- Stage 2 was personal, with teacher concern regarding instruction of the innovation;
- Stage 3 was management, with teacher concern about the organization and management of new information and the ability to organize it for instruction;
- Stage 4 was consequence, with teacher concern regarding how the innovation will affect student learning;
- Stage 5 was collaboration, with teacher concern over collaborating with other teachers and participating in knowledge sharing; and
- Stage 6 was refocusing, with teacher concern regarding how to improve the innovation.

Zhang et al. (2014) indicated that the stage of concern followed four dimensions of development for the teacher, as established by Fuller (1969). The dimensions are (a) unrelated concern, or little to no interest in the innovation; (b) concern for the self, which is interest in the innovation and how it might affect the teacher personally; (c) concern for

the task, or interest in how the innovation would influence teacher instruction and curriculum; and (d) concern of impact, or how the teacher could make the innovation better or investigate another innovation that would be more successful. In addition to collecting data regarding stage of concern, Zhang et al. asked the teachers to complete questions that assessed their beliefs regarding media-literacy education, integration of media literacy into the curriculum, and the level of support received to implement media literary for instruction. Their findings suggested that high levels of teacher concern were specific to self-concern, or Stages 1 and 2, for knowledge attainment and instructional implementation of media-literacy education. However, Zhang et al. reported that the teachers considered awareness of media literacy education, Stage 0, as of low concern. The researchers hypothesized that the low concern resulted from teacher exposure to a "media-saturated environment" (Zhang et al., 2014, p. 468) outside of school that heightened awareness of media-literacy education. Others have suggested that this view could be shortsighted and that exposure to media alone does not develop skills commensurate with a media-literate person (Hobbs, 2010; Prensky, 2001; Stanford History Education Group, 2016).

According to Zhang et al., teachers indicated that Stage 6, improving the innovation, was an area of weakness, and the researchers believed that more opportunities for professional development would positively impact teacher beliefs to support the integration of media literacy. If teachers display concerns regarding the implementation of media literacy, then their beliefs and perceptions regarding its benefits for student learning may also be negatively impacted.

The following section discusses teacher evolution and media-literacy use regarding preparedness and preservice training. If teachers have been expected to interweave media literacy into their instruction, then it is important to evaluate how teachers have been developed to present these concepts and expand learning opportunities for students.

Teacher Preparation and Training for Media Literacy

All 50 states have included media literacy as an objective within their public education curriculum standards (Kupersmidt, Scull, & Austin, 2010). However, there has been no established national curriculum for media literacy (Bulger & Davison, 2018). According to Lauri, Borg, Günnel, and Gillum (2010), existing teacher training has included little on pedagogy and content knowledge to implement media literacy for instruction. Moreover, in a survey of 242 U.S. colleges, only 65% of the colleges offered courses on media literacy, and few offered those courses as part of the curriculum for teacher training (Kupersmidt et al., 2010). The absence of media literacy in teacher-preparation programs has reduced the likelihood of its purposeful integration into the classroom. Moreover, limited media literacy training may have contributed to inconsistencies or questions around the objectives of educational standards versus the availability of curriculum and development opportunities (Kupersmidt et al., 2010).

Teacher-preparation programs have historically embraced a more conservative approach to teacher education that included literacy as an "individual endeavor with text, learning how to teach reading 'correctly'" (Alvermann & Hagood, 2000, p. 321). However, researchers have indicated a need to expand this view of literacy to support student transfer of knowledge, communication, and active learning. Hartshorne, Ferdig,

and Dawson (2005) suggested that teacher-preparation programs should include media literacy as part of comprehensive training and not as a standalone component. The inclusion of media literacy in the traditional curriculum and coursework of teacher-preparation programs would cultivate an "instructional or pedagogical strategy for teaching and learning across subject areas, not as a separate subject" (Meehan, Ray, Wells, Walker, & Schwarz, 2015, p. 85). Including media literacy as an instructional component would require teacher preparation programs to focus on how teacher beliefs regarding media and technology change pedagogy and how professional development contributes to teachers to improving and growing their practice.

The following section discusses how preservice media-literacy competencies of teachers can contribute to instructional opportunities for students.

Preservice Teacher Media -Literacy Competencies

Hobbs (2017a) asserted that teacher training increases the chance that "greater teacher knowledge and skills will result in changes to attitudes and behavior that in turn will contribute to changes in the kind of instruction that improves student learning" (p. 55). For preservice teachers, media-literacy exposure alone has not been sufficient to ensure its use in classroom instruction (McTavish & Filipenko, 2016). Hobbs and Jensen (2009) stated that the future of media-literacy education depended on teachers who are knowledgeable about the subject and can provide learning opportunities for students. Therefore, it is necessary for preservice teachers to develop competence with media literacy if they are to develop future meaningful learning experiences for students.

Tiede and Grafe (2016) examined the media-literacy competencies of preservice teachers from both Germany and the United States. The researchers selected the countries

for the comparison because of two similarities: Both countries shared an interest in developing and researching teacher education, and both influenced state and local education policies via suport from federal agencies. To measure the media-literacy competencies of preservice teachers, Tiede and Grafe used an instrument endorsed by the German Federal Ministry of Education and Research entitled "M^3K—Modeling and Measuring Pedagogical Competencies." The instrument measured media literacy competencies in three ways: (a) didactics, which was teaching with media content and designing media-based lessons for students; (b) media education, which was teaching students about the ethical components of media use and promoting responsible digital behavior; and (c) school development of media literacy, which was participation in professional development that would promote a system-wide approach to media instruction. Tiede and Grafe's study sample consisted of both preservice American male teachers (n = 109) with an average age of 22 and preservice German male teachers (n = 914) with an average age of 23. The researchers explained that fewer American teachers were sampled because data were initially only collected from German teachers.

Tiede and Grafe's (2016) results showed that the German preservice teachers displayed higher levels of competency regarding the use of media for instruction compared to preservice teachers from the United States. Although the results showed that 78% and 77% of German and American preservice teachers, respectively, stated that they had received instruction regarding media literacy, the researchers questioned whether the focus and quality were heterogeneous, resulting in varied levels of competencies. Tiede and Grafe identified certain obstacles regarding approaches to pedagogy and educational framework within teacher education. Even though the researchers found that the use of

Shulman's (1986) technological pedagogical content knowledge was a common framework to approach media literacy competencies for pre-teachers, there was no "common consensus about the precise shape of pedagogical media competencies, neither worldwide nor even within countries" (Tiede & Grafe, 2016, p. 20). NAMLE (2007) and the United Nations Educational, Scientific, and Cultural Organization (2017) have provided guidelines for media-literacy preservice-teacher competencies around the world, but these have been merely suggestions and not part of consistent formal standards within teacher-preparation programs. Tiede and Grafe also found that teacher-education programs in both the United States and Germany mainly included coursework in media literacy as an elective option.

Tiede and Grafe (2016) did not find a consistent pedagogical framework for schools of education approaching the instruction of media literacy for preservice teachers. If competency levels for U.S. preservice teachers were lower than those of German preservice teachers, it may have been due to the differing media-literacy resources available during teacher training. As Tiede and Grafe found, the variation of media-literacy instruction between teacher-education programs has made it difficult to equip all teachers with the skills needed to support a curriculum that develops student creativity, action, and reflection, because of (Hobbs, 2017b).

A curriculum supporting media-literacy skills in students depends on the expertise and skill sets of teachers to provide the learning opportunities (Hobbs, 2010). If teachers do not receive instruction on media literacy during their preservice training, then professional development can provide opportunities to support teachers. The discussion

that follows shows, however, that many school systems have not prepared teachers to engage with media literacy.

Media-Literacy Professional Development

According to Bakkenes, Vermunt, and Wubbels (2010), "teachers are the most important agents in shaping education for students and in bringing about change and innovation in educational practices" (p. 533). However, teacher professional development influences the degree to which educational innovations such as media literacy are supported and manifested within the classroom (Lieberman & Pointer Mace, 2008). Hobbs (2007) suggested that the majority of teachers engaging with media literacy were self-taught and acquired information from books they had read or experience through independent study. Professional development to support media literacy instruction has depended directly on school interest and funding, because there has been no national funding to support professional development for media literacy (Bulger & Davison, 2018). Even though school systems have provided funding for advanced technology for students, they have failed to invest in professional development for teachers to improve their self-efficacy and teach students necessary media-literacy skills (Russell & Schneiderheinze, 2005).

In 2007, the North Carolina State Board of Education asked teachers in that state to incorporate global education into their curricula, because it was to become a point of evaluation. Global awareness is a skill required for media literacy (Hobbs, 2010), and the International Society for Technology Education (2016) has included it in its standards. This was a novel idea, and some researchers commented that many teachers were confused about how to incorporate global education into the classroom and needed

professional development to understand the concept fully (Tichnor-Wagner, Parkhouse, Glazier, & Cain, 2016). Interestingly, teachers from diverse backgrounds or with immersion experiences had found it easier to include global education in their curricula. However, the case demonstrated that when a state mandated inclusion of global education in the curriculum, teachers without culturally diverse experiences were at a loss and needed professional development (Reilly & Niens, 2014).

Teacher perceptions of media literacy are shaped, in part, by their experiences with, and knowledge of, media literacy. For example, teachers without strong media literacy knowledge and skills may not hold positive perceptions of the contributions of media literacy to student learning. The following section discusses teacher perceptions of media literacy.

Teacher Perceptions of Media Literacy

Teacher perceptions regarding the importance of media literacy contribute to decisions about its inclusion in instruction. While many teachers express an interest in using media literacy for instruction, their perceptions of what constitutes media literacy has been different from the standard (McTavish & Filipenko, 2016; Schmidt, 2012).

Deal, Flores-Koulish, and Sears (2010) examined how teacher perceptions of media literacy influenced its use in instruction. Ten teacher–participants completed a course on media-literacy instruction, and the researchers assessed how participation in the course influenced teacher perception of media literacy in student instruction. Deal et al. reported that when teachers' responses to questions regarding how they conceptualized media literacy ranged from a specific focus on technology to critical analysis of media messages. The researchers found that the teachers who perceived media literacy to be

solely based on use of technology "lacked the appropriate understanding of the content of media literacy for themselves, and therefore, lacked the pedagogical content knowledge to effectively translate the material to their own students" (Deal et al., 2010, p. 125).

According to Deal et al. (2010), even though all 10 participants took the same course in media literacy, the ways that they included media literacy within their classrooms varied. Four of the teachers interpreted integration of media literacy as how well they incorporated media as a complement to instruction, and they admitted to a lack of student opportunities to evaluate and critically analyze media. Six teachers, however, used media literacy to engage students—as young as second grade—to critically evaluate media and produce messages through video creation. Deal et al. reported that the six participants who used media literacy to engage students said that they were positively influenced to integrate media literacy in their instruction during their participation in the media-literacy course. The teachers with positive perceptions of media literacy felt more confident delivering media-literacy instruction because of their involvement in the course and were able to efficiently discuss media influence with students. Deal et al. provided interview data suggesting that those teachers with a more comprehensive perception of media literacy were supported by instructors with more comprehensive pedagogical knowledge and innovative instructional practices. However, Deal et al. stated that teacher misconceptions could also have been due to uncertainty or lack of clarity regarding the skills and knowledge required to support media-literacy instruction.

Further illustrating how teacher perceptions can influence the implementation of media-literacy education, Schmidt (2012) focused on college professors' perceptions of media-literacy instruction and the extent to which they used media literacy in their

courses. Schmidt's data showed that although all participants reported media literacy as necessary, not all faculty members integrated media literacy into their instruction. According to the researcher, faculty members used examples of media for instruction, including PowerPoint presentations and streaming videos, but these were mostly teacher centered; faculty members reported using PowerPoint most often. Schmidt reported that the faculty was mainly interested in students developing professional and informative PowerPoint presentations and skills. The researcher said that faculty perceived media literacy as the use of media as a tool for instruction rather than as an opportunity to teach students about media and engage them in the creation of media. Additionally, according to Schmidt, teachers perceived media literacy as important but felt that instructors needed certain expertise to implement media literacy for instruction. Schmidt affirmed that many faculty members possibly used PowerPoint as a form of media literacy because they lacked both knowledge of media literacy and skills with technology.

To expand further on teacher perceptions, the next section will discuss how student use of technology and teacher professional development can influence instructional choices to support media-literacy education.

Teacher Perception of Technology Use to Support Media Literacy

Personal beliefs also contribute to teacher perceptions regarding media literacy and its use. Digital literacy is a facet of media literacy that supports student production of media messages and supports active engagement (Hobbs, 2010). Although it is possible to teach media literacy without using technology, doing so limits student access to opportunities that could increase their connection with ideas, people, and tools that aid in authentic and meaningful learning (Coiro, Castek, & Quinn, 2016).

Technology promises new and advanced levels of instruction, but technology is only useful for educational purposes if teachers perceive it as necessary within the content area to support authentic experiences and relevance (Swallow, 2015). Technology, in and of itself, cannot develop media-literacy skills in students (Dunleavy, Dexter, & Heinecke, 2007); instead, teachers must perceive it as a tool to support learning (McGrail, 2006). Technology in the classroom, especially teacher control of technology, has been a continual point of contention for teachers but influences the probability of its use for instruction (Murphy, 2017).

Although students may be using technology within the classroom, their use might not be solely academic. Taneja, Fiore, and Fischer (2015) defined the term *cyberslacking* as the use of technology to circumvent a curriculum that is not engaging or proves stressful for students. Cyberslacking is also a facet of multitasking evident in social media, Internet browsing, game playing, and shopping. Kraushaar and Novak (2010) observed students spending 42% of class time multitasking. However, Beach and O'Brien (2008) suggested that *multitasking* carries a negative connotation and represents an archaic approach to productivity, whereas *multimediating* is students engaging "as part of the natural order of life in the mediasphere" (p. 777). Beach and O'Brien suggested that what teachers perceive as off-task multitasking might be students multimediating as a natural part of their development and growth in an environment where technology is more available than it was previously. In other words, students are more likely to engage with a variety of technology devices instead of just one.

According to Street (2017), even though students have been multimediating, schools have still consistently supported printed texts as the medium of choice and have

not acknowledged students' preferences for multimodal communications as a platform for learning. Because of this disparity, students have frequently disengaged from the classroom and been unable to transfer knowledge and experience from the outside environment to the classroom (Street, 2017). Students' inability to transfer knowledge has also created challenges for media-literacy instruction. Dezuanni (2014) stated that although

> curriculum frameworks have been important for the development of media literacy education, their focus on the conceptual at the expense of material knowledge fails to account for the full range of resources students may deploy to successfully participate in digital culture. (p. 418)

These results suggest that although teachers may be provided with a curriculum to implement media literacy, they may still be unaware of all the resources that constitute media-literacy use, knowledge, and skills. Changing teacher perceptions would contribute to better support, design, and implementation of media-literacy instruction and could help to improve curricula with authentic and contextually relevant materials and activities. Jenkins (2006) reported that "Transmedia navigation . . . [the] ability to follow the flow of stories and information across multiple modalities," (p. 4) supports implementation of digital tools to redefine what students encounter and critically analyze to develop meaning. Because of the continually evolving and technically diverse techniques needed to engage students, teachers have needed to continually create new lessons and opportunities that integrate technology for meaningful learning.

Lowther, Inan, Ross, and Strahl (2012) defined meaningful learning with technology as activities related to media literacy that "were problem-based, required some critical thinking skills, and some use of computer applications to locate and/or process information or some manipulation of educational software variables to reach

solutions" (p. 37). However, if teachers perceive technology as undermining their classroom management and decline to share control, then they will be unable to leverage technology to better contribute to student learning. The idea of using educational technology to promote media literacy through engagement with critical thinking, collaboration, and problem-solving is a positive one, but it lacks substance if teachers perceive technology use as a threat or distraction to their instruction (Maninger & Holden, 2009).

Although teachers' backgrounds and environments shape their perceptions and beliefs, teacher-preparation programs can also contribute to pedagogy and instructional choices (Meehan et al., 2015). For teachers to learn how to effectively integrate technology into instruction, teacher-preparation programs must value media-literacy and technology skills as necessary and fundamental for developing teachers.

Teacher Preparation for Technology Use and Media Literacy

In 2007, the International Society for Technology Education released national education technology standards to establish expectations regarding technology use in schools. Even though the standards contributed to the revision of common core standards for the United States relating to technology, media literacy was not explicitly addressed in these standards (Kimmons, Miller, Amador, Desjardins, & Hall, 2015; Meehan et al., 2015). Many teacher-preparation programs have found it difficult to rationalize inclusion of media literacy when it has been excluded from the accreditation standards for the Council for the Accreditation of Educator Preparation (CAEP) or the common core standards. Teacher-preparation programs have been slow to include media literacy as part of their curricula (Meehan et al., 2015). CAEP (2015) included technology in Standard

1.5, requiring that "providers ensure that candidates model and apply technical standards as they design, implement and assess learning experiences to engage students and improve learning; and enrich professional practice" (p. P). However, media literacy was not explicitly addressed. If the CAEP requirements for accreditation of new teachers do not identify media literacy as an area of proficiency, there may be less focus on it in preservice teacher programs.

Technology integration is a necessary component of media literacy (Hartshorne et al., 2015). Teacher-preparation programs have most commonly taught technology integration through individual technology courses or in a workshop setting (Hartshorne et al., 2005). Individual technology courses and workshops for preservice teachers are not advantageous because they stifle the contextualization of information and transfer of skills needed by teachers of media literacy (Torres & Mercado, 2006). For preservice teachers, training on technology should include learning to use the technology but also how to integrate it for media-literacy instruction (Hobbs, 2010). Media literacy requires teachers to provide learning opportunities for students that blend genres, integrate assorted modalities, and transfer knowledge from a multitude of contexts. If the technology aspect of media literacy is taught separately from a teacher's content area, then authentic opportunities to include it for instruction may be missed. To effectively use technology as a tool for learning that influences student perspective, aids in the transfer of skills, and actively integrates knowledge, teachers need media literacy instruction (Brinkerhoff, 2006). Domine (2011) argued that "teachers may bring students to the starting line of media literacy—with access to technology—but do not necessarily help students know how to access pertinent and credible information, to construct meaning out

a variety of information resources" (p. 196). Media-literacy education depends on teachers who know how to use media literacy for instruction to develop students who are aware and engaged for the future.

Summary

Teacher implementation of media literacy is influenced by standardized tests and accountability measures; motivations, beliefs, and attitudes of teachers regarding use of media literacy in the classroom; preparation and training of teachers to influence knowledge and use of media literacy; and perceptions by teachers of media literacy for instruction and its influence on student learning.

After examining the multitude of factors contributing to this POP, I conducted a needs assessment at Appleton High School. This empirical investigation highlighted the relevant contributing factors in this context and investigated teacher perception of, and use of, technology to facilitate media literacy in the classroom. Although many factors contribute to the limited understanding and use of media literacy in the classroom, I selected the factor of technology support promoting the use of technology for instruction to understand how technology has been integrated into the classroom to support media literacy instruction. The investigation also provided some evidence of the ways in which teachers have been supported to effectively integrate technology and media literacy in the classroom.

Chapter 2

Needs-Assessment Study

Students have been inundated daily with varying levels of technology and media. It is therefore essential that schools instructionally address the skills necessary to effectively navigate technology, employing such means as evaluating information for credibility, providing opportunities for critical thinking, and utilizing problem-based learning opportunities. During the early development of this dissertation, I focused on the ways in which teachers used technology in the classroom. Upon further examination of existing extant research, it became clear that the presence of technology in the classroom and teachers' use of that technology did equate to teachers' use of media-literacy instruction or implementation of appropriate pedagogy. Consequently, while the survey instrument for this needs assessment focused on technology perception and use, I used the data collected to examine the extent to which participating teachers used technology in support of media literacy, the kinds of professional support the teachers received, and the ways in which the school's technology support contributed to the problem of practice.

The investigation described in this chapter provided empirical evidence of the problem of practice as well as the relevant contributing factors. Data collection and analysis focused on teacher perceptions of technology to support media literacy instruction for students and school resources available to support teachers to use technology in their classrooms. The results of this needs assessment detailed teacher perceptions of technology, the ways teachers used technology in the classroom to support media literacy, and the support they received to implement technology for instruction.

Leaders of school districts have acted disingenuously when they have authorized purchase of technology for instructional purposes and believed that the devices alone would enhance learning (Dunleavy et al., 2007). Teachers must create opportunities for students to engage with technology and use it as a tool for learning. The effectiveness of media-literacy education is determined, in part, by a teacher's level of knowledge of media literacy and skills to integrate technology into instruction (Hobbs & Tuzel, 2015).

This study relied on a convergent parallel design to investigate teachers' attitudes and beliefs, classroom practices, technology use, and student use of technology as it related to media literacy. The quantitative and qualitative data were analyzed separately and then mixed to assess teacher perceptions regarding the use of technology to enhance learning, frequency of use of technology to facilitate media-literacy learning, and technology support available in the school context.

The needs assessment study was based on the following three research questions:

Research Question 1: What are teachers' perceptions of the use of technology to support instruction?

Research Question 2: How and with what frequency are teachers using technology to facilitate media literacy learning in the classroom?

Research Question 3: How are teachers supported professionally to use technology as an instructional tool?

Context of the Study

In 2013, the county for the school in this study began a 1:1 laptop initiative in which each student received a personalized learning device in the form of a tablet (Grades 1–8) or a MacBook (Grades 9–12). At the start of the 2016–2017 school year, the

1:1 initiative was completed and every student had his or her own learning device. At the high school level, many teachers received MacBooks after their students, so professional development to use this technology lagged behind the implementation schedule even after all staff members had their own 1:1 device. The failure to implement timely and adequate professional development left teachers learning and implementing technology through trial and error or not at all. Many teachers expressed frustration with the county for purchasing expensive technology and not funding professional development, and others expressed concern that the county viewed technology as guiding instruction instead of supporting relevant instruction (Murphy, 2017).

Method

The convergent parallel design for the research included surveys and brief follow-up interviews with six teachers. The surveys collected data regarding teacher use of technology for instruction and attitudes towards technology implementation for instruction. The subsequent interviews provided information about implementation of technology for instruction, beliefs regarding the 1:1 initiative process, and benefits or challenges related to technology use in the classroom.

Instruments

This investigation relied on two instruments: a survey using questions with 5-point-Likert-scale responses to collect quantitative data and a 15-question interview protocol to collect qualitative data.

One-to-One Computing Survey

I developed the 17-question Technology and 21st Century Skills in Students Survey from Dunleavy et al.'s (2007) One-To-One Computing in Education Research

survey. The survey measured teacher use of technology, technology use in the classroom for instruction, and teacher access to technology as a tool for learning.

Eight of the questions from the original study by Dunleavy et al. (2007) utilized a 5-point Likert scale, and two utilized a 6-point Likert scale. The remaining questions requested various demographics data. I deleted only one original survey question from Dunleavy et al. (2007): "On how many days a week has the typical student in your class used a computer while you were teaching class?" Because all of the students had a 1:1 device in the form of a MacBook, computer use would not necessarily connect with learning. Additionally, the use of the word *typical* raised concerns because the working definition was unclear.

Teacher Interview Questions

The interview questions were also from the Dunleavy et al.'s (2007) study regarding 1:1 computing. I selected these questions because they asked about the inclusion of 1:1 devices in the classroom, professional development to advance technology skills, and instructional changes attributed to technology. The questionnaire presented participants with an opportunity to discuss how they utilized technology in the classroom. It also asked participants to describe their experiences as teachers within the 1:1 initiative and whether the available professional development supported their teaching strategies using technology. I used all questions from Dunleavy et al.'s (2007) study but changed the word *tablet* to *MacBook* in six out of the 15 questions. I preferred the use of *MacBook* instead of the more general *computer* in the needs assessment to specify teacher use of technology supplied by the county rather than another device.

Procedure

The following sections describe participant identification and selection, data collection, and data analysis.

Participant Identification and Selection

The participants in this study were from Appleton High School2 in Northern Virginia. This high school was one of three in the county and had approximately 1,900 students enrolled. The county approved a research application to conduct the study with teachers before the study commenced. After a follow-up meeting in June 2017, the county granted approval to proceed with the empirical investigation. All 169 teachers received the survey by e-mail on March 17, 2017, and 28 teachers (64% female and 36% male) responded, a 17% response rate. The low response rate could be attributed to lack of interest or time to complete the survey. Forty-two percent of respondents had 20 or more years of teaching experience (n = 12) and 71% of respondents taught 9th grade (n = 20). Table 1 shows the numbers of participants by department (n = 26).

The family and consumer science teacher did not respond, the smallest groups were from the high-intensity language training and the business departments with 4% (n = 1) each, and special education represented 21% (n = 6) of the sample. These results were not surprising, because the special education department, with 35 teachers, was the largest in the school.

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[2] Pseudonym.

Table 1

Participant Responses by Department

Department	% (*n*)
Special education	21 (6)
Math	14 (4)
English	14 (4)
Science	10 (3)
Social studies	10 (3)
Health and physical education	7 (2)
Art	7 (2)
High-intensity language training	3 (1)
Business	3 (1)
Family and consumer science	0 (0)

I used purposeful sampling to select six teachers with varied content areas and expertise for one-on-one interviews. I selected teachers based, in part, on who had experience with technology in an instructional setting. The six interview participants included four Caucasian females, one African-American female, and one Caucasian male. All five females were teachers at the school, and the male teacher served as the information technology coordinator (ITC) for the school. However, according to the school district, the ITC was also regarded as an instructor of technology. The teachers represented science, special education, technology, English, and library sciences, across Grades 9–12.

Data Collection

From June 9–19, 2017, teachers participated in one-on-one interviews that each lasted approximately 30 minutes. I informed teachers that the interview questions would be about technology use, specifically 1:1 devices in the classroom, implementation of the

devices for learning, and perceptions of technology professional support and development. I informed participants regarding confidentiality of the study and obtained their verbal consent to participation. Handwritten notes and audio recordings captured details from the interviews.

Data Analysis

The analysis included descriptive statistics from the Technology and 21st Century Skills in Students survey related to use of technology in the classroom, perceptions of technology use for instruction, and instructional challenges due to the inclusion of technology. In the survey, teachers positively or negatively rated their experiences with technology in the classroom, their daily use of technology in the classroom, and whether educational technology was considered an advantage or disadvantage in the classroom for teaching and learning.

To analyze the interview data, I employed deductive coding to perform the analysis (Saldana, 2016). The survey results provided a general sense of how the teachers used technology in the classroom. The qualitative data, in contrast, provided an opportunity to explore teachers' perceptions of technology, specifically how technology was used to support media literacy. Coding based on patterns from the interviews demonstrated "habits, salience, and importance in people's daily lives" (Saldana, 2016, p. 6), and the data showed how technology was embedded in classroom instruction and whether teachers felt it was necessary, important, and advantageous for learning.

Themes emerged from the interview notes regarding the teachers' use of technology for instruction and professional development opportunities for technology.

The survey results supported these emergent themes, connecting the quantitative and qualitative analyses with the research questions.

Findings and Discussion

This section describes the results of the needs assessment results relative to the research questions and discusses associated findings in existing literature.

Perceptions Regarding the Use of Technology to Support Instruction

Research Question 1 addressed teacher perceptions regarding the use of technology to support instruction. Overall, teachers perceived computers as a means to improve the aesthetics of assignments but as a hindrance to student collaboration, work ethic, and work performed outside of the classroom. Based on a 6-point Likert scale ranging from 1 (don't know) to 6 (true-a strong advantage), survey results from Question 9 suggested that 39% (n = 11) of respondents believed that students created better looking products with the use of technology. However, 46% (n = 13) of respondents did not perceive technology use as advantageous for making students work harder on their assignments when using computers. Additionally, 35% (n = 10) of respondents did not perceive technology use as advantageous for students helping each other more while doing computer work, and 29% (n = 8) of respondents did not find technology advantageous for students taking more initiative outside of class to perform extra research or polish their work. Table *2* summarizes these findings. If teachers perceive technology to be useful for the aesthetics of an assignment, but not beneficial for student collaboration and work ethic, teachers may benefit from media-literacy skills training to encourage provision of opportunities for students and change their perceptions of technology and media literacy as beneficial for learning.

Table 2

Teacher Perceptions Regarding Student Use of Educational Technology

Item	*M* (*SD*)
a. Students create better-looking products compared with writing or traditional media.	4.00 (1.02)
b. Computers provide a break from routine learning activities.	3.04 (1.35)
c. Students help one another while doing computer work.	2.54 (1.33)
d. Students take more initiative outside of class—e.g., extra research or polishing.	2.50 (1.29)
e. Students' writing quality is better using word processing.	2.92 (1.21)
f. Students work harder at their assignments using computers.	2.13 (1.42)
g. Students are willing to do second drafts.	3.05 (1.40)

Note. Responses to each item used a 6-point Likert scale (*not an advantage* to *true-a strong advantage*).

To further understand the use of technology for instruction at Appleton High School, teachers answered interview questions regarding their perceptions of MacBook use for instruction (see Appendix A for a summary of the results).

Student collaboration. Question 11 of the interview protocol asked participants about changes in student collaboration with the adoption of MacBooks. The responses provided evidence that teachers were interested in opportunities for students to collaborate virtually but also indicated a perception that collaboration provides more opportunities for students to cheat on assignments. Participants 2 and 3 indicated that students could collaborate virtually instead of physically but did not specifically indicate whether these learning opportunities were a part of instructional practice within their classrooms. Although the idea of virtual collaboration would provide freedom for students, Participants 3 reported issues with collaboration and concerns over

opportunities for plagiarism. Participant 3 also cited physical proximity of students and technology use as a factor that would promote cheating. These data suggested that although participants were positive about using technology for instruction, they may not have been aware of how instruction can be designed to decrease opportunities for cheating and off-task behaviors. These results from the interviews were not surprising, because data discussed later in the chapter suggested the majority of technology support for teachers at Appleton High School had been technical rather than instructional.

Hobbs (2010) suggested that "active participation through teamwork and collaboration" (p. 17) is a necessary social competency for understanding the message and purpose of media. Additionally, social learning theory (Vygotsky, 1978) supports collaboration as fundamental for learning because individuals create meaning based on their interactions with each other within their environment. If participants did not support collaboration with technology use, they may have missed opportunities for students to learn from each other and perceive technology as a tool for learning. Researchers have reported that student collaboration through the use of digital tools such as blogs and wikis supported active engagement and opportunities for reflection and consideration of differing perspectives (Beach, 2012; Churches, 2008). Engagement and reflection are part of the fourth core principle of media literacy established by NAMLE (2007): "Media literacy education develops informed, reflective and engaged participants essential for a democratic society" (p. 5). If teachers provide models for collaboration within the classroom, then active learning opportunities will lead students to develop mastery and improved technology self-efficacy that will permit them to engage with technology on their own outside the classroom (Bandura, 1977). Overall, instruction with technology

cannot take place unless teachers feel it promotes learning and has value (Redmond, 2012).

MacBooks for instruction. Question 12 of the interview protocol asked participants about perceived problems they encountered with the incorporation of the MacBooks for instruction. Overall, the data suggested that the participants perceived MacBooks as detrimental to inquiry and analysis and distracting from instruction. For example, Participant 4 stated that because of the use of MacBooks in the classroom, critical thinking had decreased. She stated that students were "less patient" and just wants to "Google and take whatever pops up" (Participant 4). Participant 5 perceived MacBooks as contributing to students' inability to focus and tendency to "easily get off task." This was supported by Participant 3, who perceived MacBooks as a "distraction preventing learning." Interview data suggested that all six participants attributed to MacBook use a perceived a lack of control in the classroom and behavioral issues related to student cheating and off-task behaviors during instruction. Participant 2 stated that teachers had "less control in the classroom" due to technology and that there needed to be more "security and control of MacBooks." This sentiment was supported by Participant 9, who stated that "I hate that we do not have the ability to control what happens on devices—we have issues with Facetime, Skype, Texting—students cannot self-regulate and we need to be able to see what is happening."

Researchers have found that teachers who believed that instructional technology does not advance student learning and acts as a distraction in the classroom were less inclined to use it in their instruction (Chen, 2008; Ertmer, 2005; Redmond, 2012). Other research investigating technology integration has offered evidence suggesting that a

teacher's propensity to use technology is influenced by the behavior and responses of students (Tsai, 2015). An example of this was the way that Participants 3–5 exhibited negative observations because students were cheating and engaged in off-task behaviors. Media literacy includes use of technology to promote students' critical thinking skills (Zhao, 2015). Opportunities for authentic learning using technology improve student understanding, relationships, and intellect, which promotes innovation and entrepreneurship that are needed for students to become globally aware and sustainable for the future (Brown, Collins, & Duguid, 1989; Schoen & Fusarelli, 2008; Zhao, 2015). If teachers limit students' access to technology, then they limit media-literacy opportunities that can help students to understand and evaluate the information they encounter on their own outside of school through social media platforms such as YouTube, Facebook, Instagram, and Twitter (November, 2016).

The cause of interview participants indicating that students were off-task and involved in other disciplinary behaviors could have been pedagogy that was less effective in implementing technology as a tool for the active application of knowledge. Teachers must provide instruction that engages students to be active participants in their learning with technology. NAMLE's (2007) first core principle for media literacy was: "Media Literacy Education requires active inquiry and critical thinking about the messages we send and receive" (p. 3). Participants noted that students lacked critical thinking skills; perhaps this was because the instruction provided was not utilizing technology to cultivate these necessary skills. To illustrate this, Participants 2 and 4 indicated that they used Kahoot and Quizlet as part of their instruction with technology, but these educational platforms were for remembering and reviewing information and did not

support critical thinking or inquiry. Technology alone cannot provide opportunities for learning; it is the teacher who must develop instruction to guide student inquiry and engagement while using the technology (Hakkarainen, 2009).

Teacher Facilitation and Frequency of Technology Use for Media-Literacy Learning

Research Question 2 asked how, and how often, technology was used to facilitate media-literacy learning in the classroom. Overall, survey results suggested that the teachers used MacBooks frequently for test review and information management, but there was little evidence that teachers used MacBooks to support media-literacy activities such as inquiry projects, problem-based learning, digital tools, or multimedia production. Using 6-point Likert scales, Question 6 of the survey explored how often students used technology in class to complete specific tasks. The responses ranged from 1 (*not applicable*) to 6 (*daily*). To analyze this data, *not applicable* responses were recoded as missing values.

Overall, participants indicated that they rarely or never used student tasks specifically related to media literacy, such as digital tools and digital creation. Table *3* summarizes the results. Approximately half (n = 15) of respondents rarely or never used technology for media-literacy activities. Moreover, almost one third of the respondents reported that students used technology only monthly, for the purpose of research. The data suggested that the majority of student time with technology was spent on word processing (32%) and tutorial software (32%). As Table *3* indicates, participants had not widely implemented student use of technology focusing on creation and digital tools to enhance learning and media production. However, teachers had relied more on student

technology use to support the remembering and understanding of concepts and the production of word-processed documents.

Table 3

Student Use of Technology for Specific Instructional Tasks

Item	*M* (*SD*)
a. Produce word-processed documents.	3.25 (1.43)
b. Conduct online research.	2.89 (1.25)
c. Use tutorial software.	2.75 (1.56)
d. Use digital tools and peripheral devices.	2.36 (1.56)
f. Write a story then illustrate it with scanned images to make a story.	1.65 (1.23)

Note. Responses to each item used a 5-point Likert scale (*never* to *daily*).

To further understand the use of technology for media-literacy learning in the classroom at Appleton High School, I examined data from Question 9 of the qualitative interviews. For this question, teachers described how technology was implemented to support higher order thinking skills (e.g., the use of digital tools and creative inquiry to evaluate information and create a product) and lower order thinking skills (e.g., remembering and understanding information; Bloom, 1956; Churches, 2008). Understanding how students used technology as a tool to support the inquiry and creation that is part of media literacy (NAMLE, 2007) required assessing how teachers supported both knowledge acquisition and active engagement (Coiro, 2018).

Question 9 explored how teachers used MacBooks during instruction. Participants 1 and 2 confirmed the findings of the survey suggesting that respondents used MacBooks for lower order thinking skills of knowledge remembering and understanding, including the review of academic materials, test preparation, and information management. Participants used MacBooks for small group remediation, online scavenger hunts

(Participants 2 and 4), and the organization of assignments through educational platforms such as Blackboard and Google Classroom (Participants 1 and 5). Additionally, participants utilized Kahoot, Quizlet, and BrainPop as accompaniments for testing or review of concepts but not as media-literacy tools for inquiry and problem-based learning. The evidence suggested that participants used MacBooks as an addition to teacher-led instruction rather than as a tool central to student learning. For example, Participant 6 believed that teachers used their MacBooks as tools for clerical tasks instead of critical thinking with students. Recall that the survey results indicated that approximately half of respondents disagreed that technology was an advantage for students working harder on assignments; this result may be related to teachers' use of technology for test preparation and quick reviews rather than for actual class assignments.

According to Webb (2007), it is important to provide learning opportunities that promote active engagement and creation to promote the use of technology that supports student inquiry and higher order skills employed in the implementation of media literacy. Creation, as the highest tier, aligns with the core tenets of media literacy as established by NAMLE (2007), because the construction of media messages requires more than merely understanding arguments and identifying biases, but utilizes critical thinking to create a position and actively engage with and analyze information.

Researchers have found that higher order skills, such as analyzing, creating, and evaluating, form a necessary partnership with technology use (Krathwohl & Anderson, 2010). This idea was supported by McCain (2005), who stated that

> the use of technology in the classroom is not the critical issue facing education in the 21st century. [Rather], the issue of foremost importance is to develop thinking

> skills in our students so that they will be able to utilize the power of technological tools to solve problems and do useful work. (p. 84)

Transforming experience with digital tools, such as MacBooks, can be seen in the authentic anchoring of texts to produce student interest and transference of knowledge (Sewell & Denton, 2011). If teachers at Appleton High School perceived the use of educational technology platforms such as BrainPop and Quizlet as utilizing technology for learning, then technology instruction that could promote active inquiry, critical thinking, and transference of skills in students was not present. As NAMLE (2007) stated, "Media literacy education requires that teachers routinely foster critical thinking and that institutional structures support critical thinking in all classrooms" (p. 3). Students need opportunities to develop skills that support media literacy so that they can establish feelings of mastery and motivation to engage with technology as a tool for inquiry and problem-solving (Vygotsky, 1978).

The data suggested that, participants used technology in the classroom, just not in ways that supported elements of media literacy, such as critical thinking, problem-solving, or digital creation. While potential opportunities existed at Appleton High School to use technology to support media literacy and higher order thinking skills in students, teachers were reticent because of concerns about cheating and perceived lack of control in the classroom. Additionally, the data suggested that perhaps participants did not use technology to support media literacy because they lacked pedagogical knowledge. The next section discusses the need for technology support for teachers to engage with media literacy for instruction and increase competency.

Technology Support

Hobbs (2017a) suggested that teacher collaboration with technology specialists is vital for teachers to develop the skills for media literacy implementation. Research Question 3 asked how teachers were supported professionally to use technology as an instructional tool. Table *4* summarizes the relevant findings from the survey. The majority of respondents seldom required technology support related to technical (78%, n = 22) or instructional (74%, n = 20) assistance. When asked to evaluate technical support, 57% (n = 16) of respondents rated it as excellent and mostly available (53%, n = 15). Furthermore, respondents rated the quality of instructional support as good (42%, n = 12) and mostly available (53%, n = 15). Quality of support was statistically significant (p = .063) because three respondents reported that they received no support for instruction with technology. The findings indicated that instructional and technical assistance was consistent in availability but differed regarding support for incorporating technology into instruction. Teachers reported excellent support regarding computer issues relating to hardware and software fixes but showed a need for instructional assistance of equal quality. As indicated in Chapter 1, opportunities for media exploration and inquiry for students are linked to classroom instruction that provides these learning opportunities. If teachers do not feel supported professionally to develop instruction that includes media literacy, then students will lack in opportunities for enhanced creativity, critical thinking, and evaluation of information (Inan & Temur, 2012). Teachers require professional support that provides guidance, practice time, and feedback on appropriate integration of technology to teach and facilitate media-literacy instruction.

Table 4

Participant Perceptions of Technology Support

		M (*SD*)	
Item	Anchors	Technical support	Instructional support
Frequency of need	*daily–seldom*	2.21 (0.42)	2.11 (0.51)
Availability of support	*never–always*	4.11 (0.69)	3.86 (1.04)
Quality of support received	*poor–excellent*	3.54 (0.58)	3.20 (0.71)

Note. Reponses to all items used 5-point Likert scales with the indicated anchors.

Researchers have found that, in kindergarten through 12th-grade settings, the technical and instructional support for the implementation of technology is linked to the role of the ITC (Cohen & Hill, 2000; Tondeur, Cooper, & Newhouse, 2010). ITCs are most valuable when they are given the opportunity to provide "support by walking around" (Marcovitz, 1999, p. 1041). ITCs play a key role not only through their availability but also through the nature of their interactions with stakeholders (such as teachers and administrators) to understand any technology-related issues and provide information on policy issues related to technology. For ITCs to be valuable in technology integration, specifically in the area of media literacy, they must form relationships with teachers so that they can see how the curriculum is designed and how technology can be beneficial for teaching vital concepts such as critical thinking, problem-based learning, and digital creation (Marcovitz, 1999). According to Beach (2012), technology support that is on-going to establish professional relationships between ITCs and teachers and includes opportunities for teacher-to-teacher collaboration has positively influenced the use of digital tools for classroom instruction (Beach, 2012). However, if the ITC at Appleton High school was required to primarily fix hardware and software issues on MacBooks, then his availability in the classrooms to support teachers in technology use

or design professional-development opportunities that influence collaboration and inquiry for teachers would have been diminished.

To further understand technology support received at the high school, interview participants answered questions regarding their perceptions of frequency, availability, and quality. Appendix B shows teacher responses regarding support related to the ITC, their skill sets, teacher-to-teacher assistance, and professional-development opportunities. The qualitative data indicated that professional support and development, as well as the role of the ITC, contributed to participants' use of technology and media-literacy instruction.

Professional development and support for technology instruction. Hobbs (2010) explained that digital and media literacy "are not separate, but rather complementary and mutually supporting . . . constantly evolving and intersecting in new and interesting ways" (para. 5). Digital tools in the classroom support the development of media literacy, because students actively engage contextually with technology as a learning tool and not just as an appendage for entertainment. Although neither the survey nor the interview protocol directly asked about professional development to support media literacy, it was possible to infer the media literacy needs of teachers from the results of the questions regarding professional development for technology.

Question 7 of the interview protocol asked participants about the professional development opportunities they received to integrate technology into the classroom. The findings indicated that participants needed more professional development supporting the use of technology for instruction. Participant 5 indicated that teachers at the elementary school received professional development regarding technology, but there was still not enough at the high school level. Although participants showed an interest in professional

development, either through leading it (Participant 1) or attending outside opportunities such as Google Summit (Participant 5), they looked to the county to provide professional development to decrease "hunting and pecking around" (Participant 4) for technology resources.

Researchers have found that professional-development opportunities that allowed for teachers to coach, mentor, and engage in face-to-face sessions were the "most powerful means of enhancing instructors' technological development" (Psiropoulos, Eriksson, Fletcher, Hargis, & Cavanaugh, 2014). Media literacy depends on teachers who have the knowledge and skills to bridge the "often insular and entertainment-focused digital culture of the home to a wider, broader range of cultural and civic experiences that support their intellectual, cultural, social and emotional development" (Hobbs, 2010, p. 25). Moreover, Hobbs (2010) suggested that digital literacy skills can be successfully acquired through "a combination of trial-and-error strategies along with an 'elbow-to-elbow' friend who offers appropriate help and support when needed" (p. 39). The data showed that although participants reported a need for more professional development, they had no recommendations regarding its form or mode of delivery. The data from the interviews indicating a need for more professional-development opportunities contradicted the survey results, which showed that 74% of respondents seldom needed instructional support regarding technology. These findings could be indicative of the personal skill sets of teachers regarding technology, because participants described themselves as "tech-savvy" (Participant 5), "self-taught" (Participant 4), and having a propensity to Google everything (Participant 2). These results also suggested that participants perhaps believed they used technology but perceived a need for more

professional development to achieve more meaningful integration. Without professional-development opportunities, participants may have turned to their own skill sets or other teachers for support. Participants 5 and 6 indicated that teacher-to-teacher assistance and opportunities to support each other through social learning helped them to figure out technology problems. The discrepancy between the desire of interview participants for professional-development opportunities and the survey respondents lack of need for instructional support may be due to participants' propensity to rely on their own skill sets; their perceptions of school-based supports, such as the ITC; and their lack of knowledge regarding what is necessary to promote instruction that includes media literacy.

The informational technology coordinator and technical support. Question 6 of the interview protocol asked participants about the technical support they received to integrate technology into the classroom. Five out of the six participants cited the ITC as their primary source for technical support. However, none of the participants elaborated on how the ITC supported them technically, and instead they discussed how he supported them instructionally. Participant 6, the ITC for Appleton High School, responded to this question by stating that "technology support is minimal" and that ITCs needed more professional development for instructional aspects. These data suggested a lack of clarity regarding the definition of technical support and the role of the ITC. The survey defined technical support as "computer and software fixes," but within the interviews participants discussed instructional support in response to a question about technical support. The job definition and perceived role of the ITC within Appleton High School may be responsible for the confusion. At the time of the study there is one ITC to support approximately 2,000 students and 169 teachers, exceeding the quota set by the Virginia General

Assembly of one ITC per 1,000 students (VDOE, 2007). The ITC fulfilled the majority of MacBook repairs and was also responsible for instructionally supporting teachers regarding technology. As discussed in the survey findings, 42% (n = 12) of participants rated the quality of instructional support for technology as *good* compared with 57% (n = 16) who rated the quality of technical support as *excellent*. If teachers at Appleton High School perceived ITC instructional and technical support as interchangeable, as the interview data suggested, then results from the survey would not provide an accurate picture regarding the quality of support at the school.

According to the survey and interview data, although teachers reported that they had access to technology, they perceived a need for more support to develop instructional skills. The results suggested that teachers had an interest in using technology for teaching and learning, but there were few professional-development opportunities to provide structure and guidance on how technology could used for instruction. If the ITC was focused primarily on technical support of teachers, then the instructional support needed to implement media literacy for instruction would not have been a priority.

Overall, teachers reported a need for the implementation of technology within Appleton High School through guidance from the ITC and opportunities for professional development. Although teachers perceived themselves to be proficient with technology, there was still a gap between how teachers were using technology in the classroom and what would be required to support media-literacy instruction for students.

Conclusion

The needs assessment provided an opportunity to understand technology use through teacher perceptions regarding instructional implementation and support. If

teachers are limited in their awareness of media literacy, then students will be limited in their ability to think critically, communicate effectively, understand diverse perspectives, and evaluate the information they are inundated with daily (NAMLE, 2007). Teachers should be encouraged and aided to develop meaningful instruction, and technology should be perceived as a tool for learning and not as a threat to classroom management and engagement.

Data from the study revealed the following regarding the research questions.

Research Question 1

What are teachers' perceptions of the use of technology to support instruction?

Teachers perceived

- that students produced better looking products using technology. However, teachers reported that students did not work harder on assignments or take more initiative outside of class to polish assignments;
- student collaboration with technology as an avenue for cheating; and
- a lack of control when technological devices were used for instruction.

Research Question 2

How, and how often, are teachers using technology to facilitate media literacy learning in the classroom?

- Teachers rarely implemented technology to support media literacy through the use of digital tools or video and audio production. They used technology more frequently for word processing and to support tutorial software.

- Technology was mostly an addition to teacher-led instruction rather than a tool central to student learning.
- Teachers perceived educational technology platforms such as BrainPop and Quizlet as helpful for learning and organizing information but did not utilize technology to support the media-literacy skills of active inquiry, critical thinking, and creation.
- Needs-assessment data suggested that teachers perhaps did not use technology in ways to support media literacy because they lacked pedagogical knowledge.

Research Question 3

How are teachers supported professionally to use technology as an instructional tool?

- The ITC at Appleton High school was required to primarily fix hardware and software issues on MacBooks and was largely unavailable to support teachers in technology use or design professional-development opportunities that influence collaboration and inquiry for teachers.
- Teachers reported a need for more support from the county regarding technology resources for instruction.
- Due to a lack of support, teachers relied on their own skill sets to understand and implement technology for instruction.
- Teachers reported social learning as an important source of support to learn more about technology implementation.

The following chapter explores existing literature in support of a media-literacy intervention to promote teacher learning and professional development. The idea of teachers as learners who embrace media literacy as educational innovation will be explored through a theoretical framework of four dimensions that includes personal beliefs and values, professional practice, professional development, and salient outcomes (Clarke & Hollingsworth, 2002). For students to understand and engage with media literacy in the classroom, teachers need to be supported as learners to develop knowledge and skill sets to provide meaningful instruction.

Chapter 3

Intervention Literature Review

The needs assessment provided evidence suggesting that teachers frequently used technology to support test review and information management and were less likely to include media literacy (e.g., problem-based learning, inquiry projects) in their instructional use of digital tools and multimedia presentations. Although teachers expressed a positive attitude toward the inclusion of technology to support instruction, evidence from Chapter 2 suggested that teachers required professional development regarding how to integrate technology to support media-literacy competencies such as critical thinking and creativity. It may also have been possible that existing professional support for teachers to develop knowledge of strategies to support media-literacy instruction was limited because the ITC was focused on technical repairs rather than instruction assistance. This chapter explores teachers as learners, evidence-based strategies for facilitating teacher media-literacy training, and how professional development, self-efficacy, and personal beliefs all contribute to media literacy's inclusion in professional practice.

Even though researchers have discussed teacher motivation and attitudes toward media literacy (Hobbs & Tuzel, 2015), few studies have examined relevant pedagogy to support teachers' media-literacy learning and practice (Redmond, 2012). Although it is critical that school leaders view media literacy as an effective way to increase student problem-solving skills and critical thinking, it is equally important for leaders to provide teachers with opportunities, training, and support to learn and implement these strategies effectively (Hobbs & Frost, 2003). Teacher growth toward media literacy requires

teachers to understand the concepts regarding implementation such as opportunities for critical thinking and active participation and engage in learning that integrates new ideas into their existing pedagogy.

When considering media-literacy education and addressing teachers' need for knowledge, training, practice, and support, it is helpful to think about teacher change. There are different models of change that can influence teacher growth and development. Historically, Lewin (1947) provided a linear change model, from a management perspective, with three stages: unfreezing, moving, and freezing (Figure 2). In the first phase, unfreezing, people are made ready for a change by considering their current situation and potential changes that could make it better. Individuals are asked to reflect on the status of their current situation and the possibility and benefits of adopting a change. In the second stage, changing, individuals commit to change and engage in improvement actions based on benefits received or a sense of obligation. The third stage, refreezing, involves becoming familiar with a new mode of operation to form new relationships and ways of thinking.

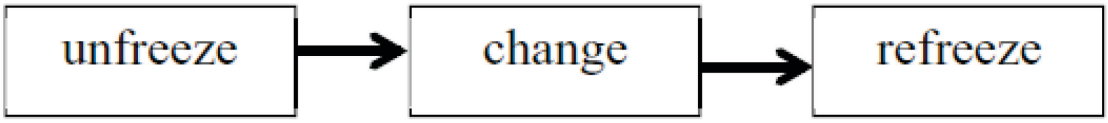

Figure 2. Lewin's change-as-three-steps model.

Lewin's (1947) linear model influenced many models for teacher change (Guskey, 1986). For example, Guskey (1986) developed a four-part linear model specifically focused on change in teachers. Guskey suggested that teacher change in beliefs and attitudes are based on changes in classroom practices that equal a change in student learning. Guskey's (1986) model of teacher change suggests that once teachers see how changes in the classroom positively influence students, beliefs and attitudes to

adopt the change will be established. Guskey (1986) stated that change comes from teachers' own experiential learning based on what works in the classroom: "Practices that are found to work-that is, those that teachers find useful in helping students attain desired learning outcomes- are retained and repeated. Those that do not work or yield no tangible evidence of success are generally abandoned" (p. 384). Although both Lewin and Guskey (1986) employed linear models of change, Lewin required people to initially prepare for change by reflecting on their attitudes and beliefs to reject the status quo and embrace movement toward a more ideal situation. However, Guskey (1986) believed in action as a fundamental first step for a change in belief and attitudes. Even though Lewin (1947) and Guskey (1986) perceived teacher change to be based on reflection and authentic application in the classroom setting, these models fall short in regard to media literacy implementation. Research suggests that teacher change for media literacy implementation relies on more of a holistic approach to include school context and professional development opportunities (Zhang, Zhu, & Sang, 2014).

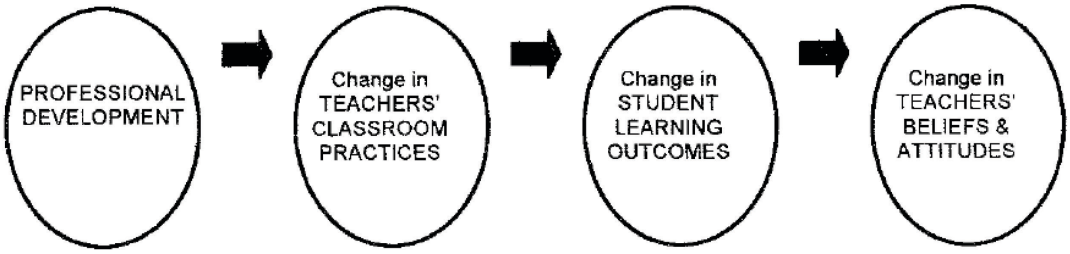

Figure 3. Guskey's model of teacher change. From "Staff Development and the Process of Teacher Change," by T. R. Guskey, 1986. *Educational Researcher*, *15*(5), p. 7. Copyright 1986 by T.R. Guskey.

Clarke and Hollingsworth (2002) provided a more dynamic and nonlinear approach with their framework for teacher learning in the interconnected model (Figure 4). Their framework addresses teacher development and growth within four domains of

active and reflective elements: “the personal domain (teacher knowledge, beliefs and attitudes), the domain of practice (professional experimentation) [classrooom context], the domain of consequence (salient outcomes) [student or teacher learning outcomes], and the external domain (sources of information, stimulus or support) [professional development]” (Clarke & Hollingsworth, 2002, p. 950). Although the parts of Guskey’s (1986) model for teacher change are represented in the interconnected model, learning is treated as continuous, with multiple pathways, in the later model.

Learning and change for teachers do not occur through a linear path but rely on the influence of different domains (Clarke & Hollingsworth, 2002). Clarke and Hollingsworth (2002) asserted that a change in one domain will contribute to change in another if *enaction* follows reflection from the teacher. Enaction is “‘acting’ on the grounds that acting occurs in the domain of practice, and each action represents the enactment of something a teacher knows, believes or has experienced” (Clarke & Hollingsworth, 2002, p. 951). For example, if a teacher participates in professional development, the information is enacted when it aligns with the teacher’s beliefs and is authentically integrated into the classroom context. Teachers engage in various professional-development opportunities throughout the school year.

However, the assimilation of new practices into a teacher’s curriculum requires acceptance in multiple domains. Although teachers might take opportunities for professional development, this does not mean that all acquired information is accessible for learning or applicable to instruction. For example, if a teacher is presented with an instructional strategy through a professional-development opportunity, reflection requires the teacher to consider the salient outcomes of the proposed teaching strategy in relation

to what he or she deems valuable for student learning. The teacher reflects on values and beliefs within the personal domain and student learning in the domain of salient outcomes before committing to enaction in the domain of practice. The teacher does not merely act out prefabricated pieces from professional development, but instead enacts and integrates the strategies to align with pedagogy, personal values and beliefs, and the classroom environment.

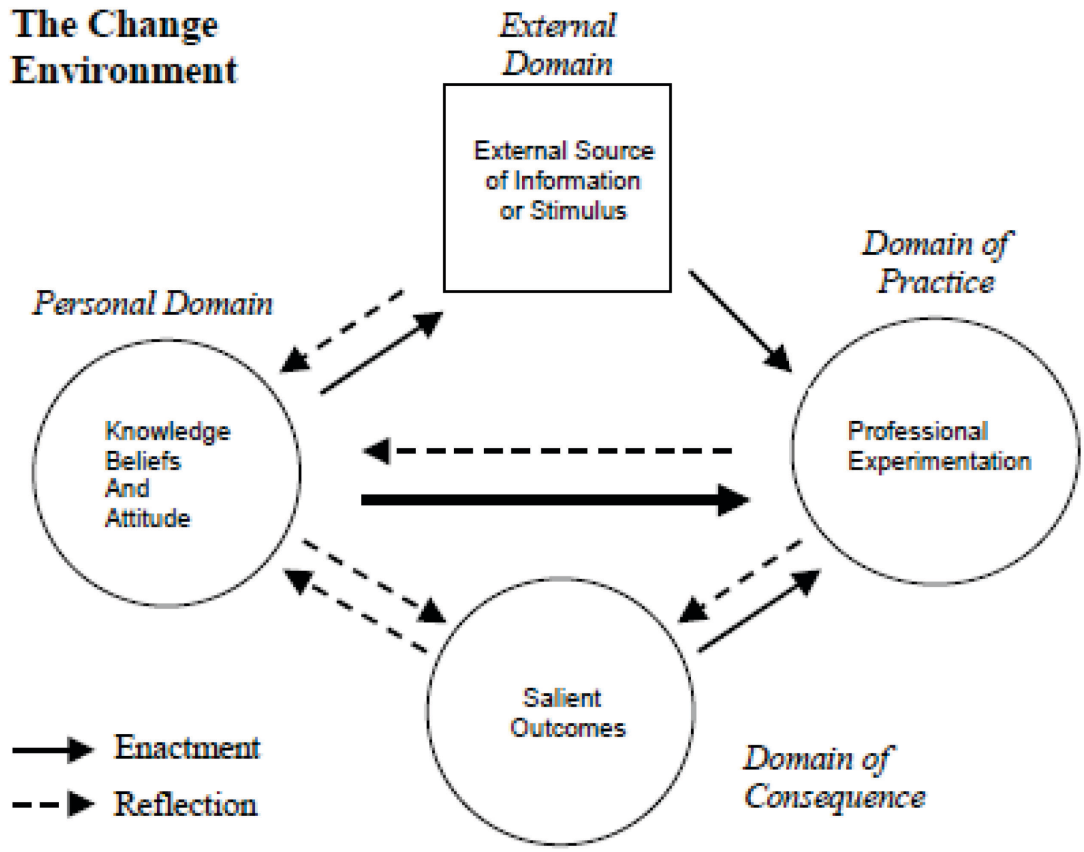

Figure 4. The interconnected model of professional change and growth. From "Elaborating a Model of Teacher Professional Growth," by D. Clarke and H. Hollingsworth, 2002. *Teaching and Teacher Education*, *18*, 947-967. Copyright 2002 by D. Clarke and H. Hollingsworth.

To further illustrate reflection and enactment, Clarke, Carlin, and Peter (1992) studied teacher change through the four domains of the interconnected model with a focus on a math teacher named Robert. Robert participated in a study that focused on his professional-development experiences within a program for active and reflective teaching in secondary mathematics (ARTISM). Prior to the study, Robert relied on mundane teaching strategies that included individual student work, chalkboard examples, and lecture, and he continued to teach in this manner even though his students showed a lack of engagement.

According to Clarke et al. (1992), after the second in-service professional development from ARTISM, Robert changed his instructional approach to include opportunities for students to work together and share their findings with the class. Facilitators modeled the investigative method of instruction during the second professional-development opportunity and provided information about collaboration and inquiry-based learning opportunities for students. Robert reported that after changing his instructional approach, the students appeared more motivated, engaged, and appropriately behaved. After this initial success, Robert, developing more new lessons that resulted in similar positive results from students, and over time he used integrated inquiry-based pedagogy to support learning and group work.

The change and growth in teaching practices reported by Clarke et al. (1992) resulted from a change in all four domains of the interconnected teaching model (Clarke & Hollingsworth, 2002). Clarke et al. reported that Robert initially participated in professional development through ARTISM because the presenters modeled innovative teaching strategies with attention to how the strategies could improve student learning

and engagement. Next, Robert utilized professional experimentation as he constructed a new approach to teaching to reflect knowledge gained through the professional development. Through his domain of practice, Robert tested the extent to which an innovative strategy would engage learners and contribute to a positive classroom environment. Based on the positive results of professional experimentation, Robert's personal domain of knowledge, beliefs, and attitude changed to perceive the new instructional strategy as contributing value to current practices. Finally, the domain of salient outcomes was evident in Robert's perception that students were more engaged with the information presented, and the results aligned with his values and beliefs regarding instruction and student learning.

Clarke and Hollingsworth (2002) discussed Clarke et al.'s (1992) study through the use of enactment and reflection to influence teacher change. The enactment was synonymous with integration because, they stated, Robert did not merely act out the parts of the lesson as presented in the professional development but integrated components to fit his content area and specific classroom needs. Clarke and Hollingsworth argued that reflection additionally supported the adoption of an innovative teaching strategy, because Robert attained knowledge of innovative teaching by reflectively linking his personal domain and external domain.

The external domain for the interconnected model includes opportunities for formal and informal learning experiences that allow teachers to share ideas and perspectives. Clarke and Hollingsworth (2002) recommend practices aligned with constructivist learning theory and framed in formal and informal learning in which teachers are provided with time to develop relationships, self-efficacy and knowledge in

the "social 'situatedness' of learning" (p. 955). Furthermore, Hobbs (2017a) stated that opportunities for teachers to collaborate socially and engage in hands-on experiences not only develop their skills to integrate media literacy for instruction but also influence future engagement with other innovative educational practices. To support a teacher intervention focused on media-literacy training, the remainder of this chapter reviews how teacher change can be supported through better alignment of the personal, practical, consequence, and external domains.

How to Change Teacher Beliefs and Attitudes

With a better understanding of the process of teacher change, it is important to identify the most effective approaches to support its cultivation. This section discusses the need for constructivism and opportunities to develop self-efficacy to influence the personal, professional, and consequence domains of teacher–learners. According to Darling-Hammond (2000), teachers who are supported in their learning positively influence student learning, achievement, and the overall school culture.

Constructivism

Constructivism is instruction combined with authentic learning through action (Ertmer & Newby, 1993; Russell & Schneiderheinze, 2005). Constructivism includes an authentic environment where the learner makes connections based on prior knowledge and experiences. It is vital that learners develop opportunities that establish active connections with new material to promote a meaningful cognitive connection within the personal domain (Watson & Vaughn, 2006). With respect to the cognitive theory of media literacy, Potter (2004) focused on how people understand media and filter it within the schema of their daily life. According to the cognitive theory of media literacy, a media-

literacy program alone will not change perspective, but constructive actions to become knowledgeable and think critically about media and its messages will result in meaning (Potter, 2004). Potter claimed that most people remain in a state of automaticity, because they are inundated with a constant stream of media messages. However, if individuals process media through authentic experience or hands-on activities to make meaning, then the unconscious acceptance of media is vanquished.

Redmond (2012) examined teachers' development of meaningful experiences through active learning with media literacy. He studied teachers' pedagogy and purpose regarding a media-literacy curriculum to investigate their choices in content and instructional practice. Redmond presented the teachers as learners who wanted to understand the concept of media literacy to provide instruction that would support constructivist learning opportunities for students. Additionally, the teachers wanted to learn how to implement the content knowledge of media literacy in a way that supported critical enjoyment or "a classroom climate based on mutual understanding, respect, and exploration . . . that responded to the nature of the adolescent students by fostering opportunities for active and social learning in order to broaden students' experiences discussing media critically" (p. 113). The teachers worked with 40 seventh-grade children and taught a media literacy workshop curriculum developed by Redmond and two of the teachers from the study. The workshop included resource materials aggregated from The Media Education Foundation, The New Mexico Media Literacy Project, and The Center for Media Literacy. Through field observations, Redmond observed that the teachers made instructional choices to support media literacy that allowed students to develop tools to understand and analyze media constructively. Redmond found evidence of

constructivism when students were introduced to vocabulary associated with media literacy and asked to identify it within advertisements: "Vocabulary students learned could be fluid and responsive to the meaning they made represented constructivist pedagogy and emerged as an important dimension of critical enjoyment because it focused on students' success and learning" (p. 110). Redmond also reported that the teachers implemented methods students could use to deconstruct media by choosing their own examples.

Another approach to media literacy based on constructivist learning theory is using digital tools, because educators should focus on teaching about media and digital literacy, instead of just with it (Hobbs, 2010). The use of digital tools to produce meaningful learning opportunities for students depends directly on how a teacher develops instruction. Although providing teachers with digital tools is the first step, learning requires teacher understanding of why and how digital tools align with their pedagogical and curricular goals. Tan and Guo (2009) investigated critical multimedia literacy, including digital tools, in an English classroom in Singapore. The researchers focused on Alicia, an English teacher with 7 years' experience who had little knowledge regarding how to engage students in using digital tools and critical multimedia literacy. Tan and Guo defined critical multimedia literacy as "techniques of analysis that can both show how images and texts have been selectively designed to reinforce one another and show their residual potential for undermining each other" (p. 317). The researchers followed and documented Alicia's development of skills to engage with students using media and digital tools through the incorporation of scaffolding and guided practice. Tan and Guo assessed what Alicia knew about media and digital tools and then actively

worked one-on-one with Alicia to design lessons. The researchers then observed Alicia using the lessons in her classroom and provided her with feedback. Tan and Guo's results showed that the experience of approaching English instruction from a different perspective that included both visual and written texts contributed to Alicia's growth as an educator. They reported that she was also able to engage with and develop instruction that she referred to as being "beyond what I am comfortable and familiar with" (Tan & Guo, 2010, p. 322). Tan and Guo commented that through their approach of constructivist learning and scaffolding, Alicia was supported to fully understand media texts and instructional strategies to engage with her students.

Like Tan and Guo (2009), my intervention aimed to provide teachers with opportunities to understand media literacy and gain dexterity with digital tools. I supported teachers professionally to develop media-literacy skills while also making media literacy contextually relevant within their content areas. Although the intervention provided opportunities for teachers to improve their knowledge of media literacy, it was also important to provide support to improve teacher self-efficacy when engaging with technology to support media literacy. If teachers are instructed on how to maintain digital discipline and believe that they can maintain it, then the personal domain of self-efficacy will be improved when instructing students in the domain of practice to support media literacy and redirect off-task behavior. Teachers would be more willing to instruct using media literacy and technology if they had the personal domain of self-efficacy to face challenges and provide instructional opportunities to include the salient outcomes of engaging and relevant instruction for students (Clarke & Hollingsworth, 2002; Huang & Liaw, 2007).

Self-Efficacy

Changing instructional habits within the domain of practice is crucial to advancing instruction to include salient outcomes of media literacy and the use of technology as a meaningful tool. For teachers, change is linked with feelings of self-efficacy, autonomy, internal leadership, and professionalism (A. Coleman, 2011; Talbert, 2010). Bandura (1977) defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3). However, Berman, McLaughlin, Bass, Pauly, and Zellman (1977) defined teacher self-efficacy as "the extent to which the teacher believes he or she has the capacity to affect student performance" (p. 137). Teachers who exhibit heightened levels of self-efficacy have increased enthusiasm and commitment to teaching, greater persistence in supporting students who are struggling, and positively influence the school environment (Tschannen-Moran, & Hoy, 2007). For teachers to have increased feelings of self-efficacy it is critical to address all four sources: opportunities for mastery, vicarious experiences, social influence, and emotional and physiological states. For teachers to experience an increase in self-efficacy they need opportunities to be successful in their performance, observe others positively engaging in the desired task, decrease feelings of anxiety, and be positively persuaded by their peer network or a more knowledgeable other (Bandura, 1977; Vygotsky, 1978).

Kupersmidt et al. (2010) studied teacher self-efficacy and the ability to implement media-literacy education regarding the dangers of substance abuse for elementary students in Grades 3–5. The researchers surmised that teachers who participated in a professional-development opportunity for media literacy would increase their self-

efficacy for teaching the topic of substance abuse and the media's influence. The researchers hypothesized that "by increasing teachers' message interpretation processing skills, teacher effectiveness at understanding and discussing media messages with their students will be increased" (Kupersmidt et al., 2010, p. 203). Kupersmidt et al. exposed teachers of Grades 3–5 to an 8-hour training session with an accompanying manual regarding media-literacy objectives and activities to increase teacher knowledge in three ways: curriculum development, pedagogy, and instructional practice. The training involved an explanation from the researchers regarding instructional implementation and experience with active simulation to enhance the teachers' feelings of self-efficacy. Kupersmidt et al. aimed to develop participant self-efficacy based, in part, on the work of Hobbs and Frost (2003), who found that even after a year-long study to support teachers in the implementation of media literacy, many teachers still experienced feelings of personal discomfort with analyzing media and providing opportunities for students to analyze media. Kupersmidt et al. viewed self-efficacy as a necessary component of their study, because teachers needed to feel "comfortable and confident in order to successfully include media literacy approaches, topics, and activities into their classrooms" (Kupersmidt et al., 2010, p. 203). Their survey results showed that teachers who attended the training indicated positive attitudes toward media literacy for instruction and had increased self-efficacy regarding their abilities to deconstruct media and understand components for analysis. Kupersmidt et al. reported that feedback responses from the teachers indicated that the majority felt that by taking part in the study their perceptions regarding the importance of media-literacy education and its influence on student outcomes had positively changed. The researchers also reported that teachers recognized

the importance of teaching students about persuasion and intent in media messages. Kupersmidt et al. provided evidence suggesting that professional development may be effective for developing teacher knowledge regarding media literacy and supporting the implementation of a media-literacy curriculum. The researchers emphasized the need for more professional support and curriculum to positively influence teacher beliefs and contribute to teachers' willingness to provide media-literacy opportunities for students.

The evidence examined above suggests that professional development as part of the external domain can engage teachers in opportunities for collaboration and socialization to positively contribute to teacher change and growth for media literacy. The next section offers further discussion of the external domain through opportunities of social and situated learning for teachers to support change, growth, and the future implementation of media literacy.

The Varieties of External Domain

Teachers define their practice with self-perceptions and peer influences within the school context. Clarke and Hollingsworth (2002) described teacher learning as both situated and social to illustrate "individual practice and individual theories of practice within an environment that both constrains and affords such individual variation" (p. 956). In other words, teachers enact practice but reflect on whether it is received and supported within their school context. The following sections discuss informal situated and social learning as external domains to support teacher change and growth.

Informal Social and Situated Learning

Clarke and Hollingsworth (2002) perceived social learning as vital to teacher learning because it provides an opportunity to understand new concepts within the school

context. Lave and Wenger (1991) supported this idea, stating that "learning is an integral part of the generative social practice in the lived in world" (p. 35). Social learning theory includes four necessary pieces: feeling a part of a community, establishing an identity within a community, developing meaning through experience, and actively participating in and engaging in an activity (Thacker, 2017). Social learning also includes opportunities for informal learning, because these opportunities for interaction and community building between teachers are often informal events that may include conversations, collaboration, or observations of other teachers (Richter, Kunter, Klusmann, Lüdtke, & Baumert, 2011). Informal-learning opportunities are usually part of the school context within the classroom and allow teachers to learn from each other and engage in active reflection on instructional practice (Richter et al., 2011).

Situated learning has many areas of overlap with social learning, including a context or environment that is supportive, interactions between participants in the community, and active engagement with others involved in the learning process (Pérez-Sanagustin, Muñoz-Merino, Alario-Hoyos, Soldani, & Delgado Kloos, 2015). However, situated learning differs slightly because it focuses more on structure and the "content, the tasks and processes that learners have to perform" (Perez-Sanagustin et al., 2015, p. 70). Situated learning could be viewed as formal learning that includes traditional elements of professional development, such as workshops or training opportunities for the entire faculty that focuses on skill building or the dispersing of information.

Social (Bandura, 1977**)** and situated learning (Lave & Wenger, 1991) were examined in an exploratory study of how the external domain of informal learning enhanced the personal and practice domains of 12 social studies teachers outside of

formal professional learning by providing opportunities to improve pedagogical knowledge and support collegial relationships (Clarke & Hollingsworth, 2002). Thacker (2017) examined the role of professional development in formal situated learning with specific structured activities and informal social learning in which teachers learned from each other through workplace interactions including collaboration and reflection. Professional learning, as opposed to professional development, occurs when teachers work together within the formal setting of schools to "work with one another on common problems and respond to their students' needs" (Thacker, 2017, p. 38). Thacker's rationale for using the term *professional learning* was the negative connotations associated with *professional development* of being "inadequate, fragmented, and superficial" (Thacker, 2017, p. 38). Easton (2008) supported the choice of *professional learning* over *professional development* as a way to respect and honor teacher professionalism and skills, provide evolving and continuous support, and develop a culture of quality. Easton supported professional learning through formal and structured events but also supported professional learning through informal events where teacher interactions were unplanned and unstructured. Thacker (2017) showed that teachers engaged with professional development, formal or informal, based on applicability to their domain of practice and domain of consequence or the ability to achieve specific learning goals with students (Clarke & Hollingsworth, 2002).

Thacker (2017) also showed that formal situated learning provided opportunities for embedded informal social learning, and these opportunities were especially evident when teachers used the breaks during formal professional development to ask each other questions regarding instruction or receive insight "from picking other people's brains" (p.

42). According to Thacker, teachers reported that the informal professional learning opportunities were valuable, because they were able to collaborate to achieve specific goals within their content areas and improve pedagogical knowledge. Thacker found that even though the teachers recognized that formal professional learning opportunities could improve pedagogy and instructional practice, they were more inclined to engage in informal learning if the information presented was not specifically relevant to their content areas. One teacher reported that during formal situated professional development he would use the time to ask other teachers, "What are you doing in your classroom right now that's working?" (Thacker, 2017, p. 42). This teacher's behavior demonstrated a desire for peer support and knowledge that is contextually relevant and authentic.

Time for learning. It takes time to develop the community and collaboration needed for teacher learning. Time is also a factor that influences the development of teacher networks and relationships. In many schools, isolation is prevalent, and solo teaching perpetuates ineffective pedagogy, reduced self-reflection, and an inability to exchange peer feedback (Kelly & Cherkowski, 2015). As Clarke and Hollingsworth (2002) discussed, time for reflection is a necessary component to evoke change and growth in teachers as learners. Yoon, Duncan, Lee, Scarloss, and Shapley (2007) supported the idea of prolonged professional development to support self-reflection, guided learning, and opportunities for teachers to actively connect with their domain of practice. Yoon et al. (2007) developed an intervention that exemplifies the importance of social learning and the extensive time devoted to professional development for technology. Enhancing Missouri's Instructional Networked Teaching Strategies was an intervention to provide teachers with an informal professional learning opportunity that

included opportunities for hands-on learning, a connection between teacher beliefs and knowledge, implementation time of substantial duration, and opportunities for teacher collaboration. Yoon et al. collected data from 31 observations of instructional specialists who facilitated the professional development and 269 teachers who took part in the activities. The framework for their professional development included time for specialists to model instructional strategies; community learning through activities to actively engage teachers; specialists and teachers participating in hands-on work with technology; connections with teacher content areas to make activities within professional development adhere to domains of practice; and time for teacher discussion, self-reflection, and engagement in activities to teach inquiry-based learning with technology. As a culminating project for the professional development of Yoon et al., teachers designed a lesson plan that included evidence of a learning standard with inquiry-based learning and technology implementation.

Yoon et al. (2007) reported that, overall, student data from those teachers who participated in the professional learning proved positive, because results showed higher scores and greater frequency of technology implementation to support learning. The researchers commented that participants broadened their use of technology across all areas of instructional practice. Focusing the professional development on embedding technology into different subjects instead of on secular use may have contributed to this expanded integration of technology. The researchers also suggested that the 2-year period provided fidelity and consistency in the professional development, because when teachers "experience technology PD that is informed by research and implemented with fidelity,

they gain a better understanding of the core concepts, which may, in turn, lead to small but significant improvements in student achievement" (Yoon et al., 2007, p. 71).

> Professional growth is possible if teachers are given the time to learn, share, and reflect on media literacy education as a community endeavor (Hadar & Brody, 2010). Time allotted for learning is critical for teachers to advance instruction. However, time to build relationships is equally important. Relationships between teachers are vital for support and collaboration to sustain teachers in both their professional and personal domains, and the next section discusses relationships further.

Time for relationship building. Social learning also relies, in part, on developing relationships for knowledge sharing, which is "a social process in which individuals learn about each other's competencies and at the same time establish trust" (Selmer, Jonasson, & Lauring, 2012, p. 213). Social learning includes the ability to locate knowledge, or find people who may be able to help solve problems and answer questions within the community (Selmer et al., 2012, p. 213). Selmer et al. (2012) explored the extent to which relationships between faculty members promoted learning based on levels of engagement and social exchange theory. The researchers defined engagement in three ways: behavioral, through participation and involvement in activities with others; cognitive, or personal goals of achievement and attention to mastery; and emotional, or attachment to work and feelings of satisfaction and belonging with others. Social exchange theory is the establishment of trust and informal commitment among members with the "expectation of receiving a non-monetary reward" (Selmer et al., 2012, p. 216). Selmer et al. surveyed 489 Danish faculty members and hypothesized that if the faculty

members took the time to build relationships within the personal domain and recognize each as sources of knowledge, they would experience heightened levels of engagement. The researchers constructed a survey to measure faculty members' perceptions of engagement, specifically behavioral, cognitive, and emotional engagement, and knowledge processing, specifically locating and sharing knowledge. Selmer et al. found that knowledge location through participant sharing of information and expertise increased levels of emotional, behavioral, and cognitive engagement among faculty members. They reported that knowledge sharing among faculty members contributed to stronger social bonds and aided in group unification. Selmer et al. discussed the long-term benefits of knowledge sharing in organizations, including "openness, changed attitudes, collective problem solving and shared interpretations" (Selmer et al., 2012, p. PP) to further develop social interaction.

Building relationships is vital to advance domains of practice and support the development of teachers as visionaries and leaders (Clarke & Hollingsworth, 2002). Time to facilitate collaboration and time to develop competence are both critical for contributing to instructional choices. Although researchers have demonstrated that both social and situated learning as informal opportunities for teachers can increase support, develop collegial relationships, and provide guided instruction, the following section provides specific examples of formal professional development frequently supported by school systems to support teacher learning and change.

Models of Formal Professional Development

Professional development is an important factor affecting the implementation of media literacy in schools (Zhang et al., 2014). Professional development is essential for

increasing teachers' comfort and competence when engaging with teaching strategies and activities related to media literacy (Kupersmidt et al., 2010). Additionally, teachers have reported that media literacy education would be implemented more often if more training to support the use of constructivist strategies were available (Sur et al., 2014). The following sections discusses formal models of professional development used in school systems around the world as an external domain to influence change.

Ongoing professional development represents a way to promote teacher learning experiences through regular engagement and practice. Episodic professional development, or professional development that exists periodically, is not conducive for practice that evolves and changes over time to fit student and teacher needs: "The argument against this predominant 'training' model, [is] that learning cannot simply be transferred in a discrete package, no matter how flexible or well-designed" (Webster-Wright, 2009, p. 703). According to Harris and Sass (2011), it takes 14 hours of an ongoing professional-development opportunity to make an impact on student learning. Episodic professional development may provide just-in-time knowledge but does not support ongoing engagement and support for teachers.

Professional development through teacher coaching allows for active engagement and support through feedback and observation of instruction. The coaching model includes a teacher and coach coming together to learn from each other, plan instruction, observe interactions with students, and collaborate to brainstorm and solve problems (Showers & Joyce, 1996). Coaching can come in a variety of forms and is not exclusively teacher to teacher but can include other staff within the school such as administrators, school psychologists, and counselors (Fabiano, Reddy, & Dudek, 2018). Peer coaching can include classroom visitations to provide feedback for instruction or support when

faced with a student issue (Becker & Pence, 2003). Researchers have showed that coaching that includes timely performance feedback has resulted in positive behavior from students and teacher improvement regarding instructional practice and strategies (Kretlow & Bartholomew, 2010).

Communities of practice include voluntary participation that is self-organized (Blankenship & Ruona, 2007). According to Wenger-Trayner (2018), communities of practice are "groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (para. 5). Communities of practice focus on the people within them as practitioners working together with a unified purpose. The leadership for a community practice comes from within and includes a focus on social learning theory and situated cognition in which "the activities of person and environment are parts of a mutually constructed whole" (Hung & Chen, 2001, p. 4). Situated cognition is learning that is embedded in the environment that surrounds the learner, in which people come together socially to talk through ideas and make sense of concepts based on the context of their environment (Hung & Chen, 2001).

There are clearly many options in the external domain to influence the personal, practical, and consequence domains of teacher learning and growth. Although a variety of professional-development approaches could support an intervention to support media literacy, it is necessary to consider which choice is best for teacher learning and change. The next section discusses such considerations for media literacy.

Professional Development for Media Literacy

For any professional development effort to be successful, it is essential to make its content relevant and applicable to the teacher's domain of practice (Clarke &

Hollingsworth, 2002). Professional development as an external domain can provide knowledge to improve teacher pedagogy but is futile if the teachers cannot understand the information or apply it to their specific context and instructional needs (Sjoer & Meirink, 2015). Teachers may initially be attracted to innovative teaching practices, such as media literacy, but without sustained support and time for engagement to develop relationships, opportunities for instructional application and advancement within the domain of practice may be missed (Clarke & Hollingsworth, 2002).

Ranieri et al. (2018) focused specifically on recommendations for professional development to support media literacy implementation. The researchers discussed three main goals of professional development to support media and digital literacy for teachers:

- Teachers must be able to use media and digital tools with knowledge of ethical and social consequences.
- Teachers must be able to instruct about media and display pedagogical knowledge of digital tools.
- Teachers must utilize media to instruct within the content area.

Ranieri et al. (2018) stated that teachers were not prepared to teach media and digital literacy, and cited Avery, McDougall, and Pritchard (2011), who showed that only one fifth of teachers understood the meaning of *media literate* and that most teachers associated it primarily with technical skills and computer use. In Italy, the country of origin for two of the researchers, the National Institute for Documentation, Innovation, and Educational Research's support increased media literacy efforts, but without adequate training and resources many teachers expressed disappointment and negativity towards implementation.

In Ranieri et al.'s (2018) study, 81 teachers participated in training that provided knowledge of media literacy, guidance on media production, and guidance for instruction using media literacy as a tool for critical analysis. The researchers surveyed the teachers at the beginning and end of the study to measure their levels of knowledge and experience with media literacy. The survey at the end of the study also gathered feedback regarding teachers' experiences. Additionally, Ranieri et al. observed participant interactions during the sessions. Overall, their data showed that the teachers improved their ability to critically analyze media through activities that helped them develop these skills. Ranieri et al. also reported that these activities supported teachers to consider transfer opportunities to connect media literacy with their content areas.

According to Ranieri et al. (2018), the teachers were actively involved in the training, but the researchers commented that it was difficult to interact with and support all the teachers equally. The researchers proposed a "professional community of practice" (Ranieri et al., 2018, p. 16) as a way for teachers to interact with each other socially and learn, and the trainer could facilitate and aid as needed. The researchers noted an additional issue, which was that the training took place after work and did not receive much institutional support. Ranieri et al. reported that although teachers wanted to be a part of the training, other factors like personal workloads and a lack of time acted as barriers to participation. Additionally, when the researchers asked the teachers to engage with media literacy for digital production, unfamiliarity with construction and other required skills slowed things down. Because of this, Ranieri et al. observed, teachers had perceived feelings of low self-efficacy.

Ranieri et al.'s (2018) final recommendations to support in-service training for media literacy focused on critical analysis of media and transfer. The researchers found that although teachers may have had experience with sharing and viewing media, they did not have frequent opportunities to engage in critical analysis of media. Ranieri et al. reported that through analysis of media, teachers could reflect on their content areas and relevantly apply media literacy instruction.

Ranieri et al. (2018) recommended the following specific techniques for teacher training to support media literacy:

- face-to-face meetings to receive feedback from, and engage in interaction with, colleagues, which provide support and opportunities for collaboration;
- guided exploration of digital tools to familiarize teachers with new skills and develop improved feelings of self-efficacy; and
- institutional support to provide time for teachers to train and learn.

To help with selecting a form of professional development that supports Ranieri et al.'s (2018) recommendations, Hobbs (2017a) reviewed professional-development opportunities to support media literacy through curriculum resources, formal training, conferences, and learning communities.

Although organizations such as the Media Education Foundation, Annenberg Learner, and Essential Lens have provided curriculum and instructional guides, teachers have carried the responsibility to read the guides and implement the curriculum for instruction. Even though the guides may have provided activities and teaching strategies promoting the use of media literacy, teachers have needed time to read the materials and

plan instruction. Additionally, teachers may have lacked the pedagogical knowledge to transfer what is provided in the curriculum guides to meaningful instructional opportunities for student learning and engagement with media literacy. If teachers faced time constraints and felt uncertain about how to implement pedagogy, they may have implemented fewer of the recommended activities to support media literacy (Hobbs, 2017a; Tiede & Grafe, 2016).

Formal training and conferences represent opportunities to cultivate teacher knowledge and support media-literacy use by providing in-depth guidance on curricular and pedagogical strategies. Teachers can engage with experts in the field and like-minded teachers who are interested in media literacy. Hobbs (2017a) asserted that being around other people who can share expertise and knowledge of media literacy is beneficial to support instructional adoption: "This attitude towards professional development reflects the belief that one educator's passion is contagious; people can be motivated to learn about media literacy when they encounter new ideas during training or conferences, even when the contact is brief" (p. 60). However, even with formal training and conferences for media literacy to provide expert influence and collegiality, there can still be a disconnect between knowledge of the information presented and transferring that knowledge to provide learning opportunities of media literacy for students.

A possible source of support to connect information learned in professional development with classroom context is the establishment of professional learning communities to support media-literacy implementation. According to Hobbs (2017a), professional learning communities to support teacher use of media literacy were first established in the 1990s, and they were recognized for "the value of coaching and

mentoring to help teachers internalize the knowledge, skills, and competencies they need to integrate media literacy into K-12 education" (p. 61). Hobbs (1998) established a professional learning community over a three-year period and influenced teachers to engage with media literacy, which contributed to shaping future programs to include media production, media analysis, and the integration of media as a school-wide endeavor. Teachers in Hobbs's (1998) study reported improved growth, personally and professionally, from participation in the professional learning community because it supported relationships and skill development with media literacy. Hobbs (2017a) argued that professional learning communities are instrumental for teacher knowledge and implementation of media literacy because they typically "include a demonstration of the model lessons, followed by theoretical framing, debriefing, analysis and reflection" (p. 62), which provides a link between practice and theory. Teachers are also supported to engage in dialogue regarding the values, goals, and possible limitations of the instruction and how it could support student learning and engagement.

With the recommendations discussed above in mind, I selected a Professional Learning Community (PLC) for the intervention because it was already a critical part of Appleton High School's professional learning structure. Teachers at Appleton High School were already familiar with the format of a PLC, and it aligned with teachers' pre-existing schemas (Piaget, 1936). Additionally, a PLC could address the recommendations for media-literacy training (Ranieri et al., 2018) and support the four domains of the interconnected model (Clarke & Hollingsworth, 2002).

Professional Learning Communities

PLCs as institutional support for the implementation of media literacy incorporate all four domains of the interconnected model for teacher change and growth (Clarke & Hollingsworth, 2002). PLCs provide a basis for teachers to informally collaborate and share best practices to positively influence the personal domain of knowledge and beliefs and the domain of practice within the classroom and produce salient outcomes of improved instruction and student learning. A PLC is "a group of educators committed to the continuous process of collective inquiry, constructive conversation about instruction and learning, and sharing teaching practice, including observation of a colleague's classroom for enhanced student learning and improved teacher practice" (Ahn, 2017, p. 83). Researchers have agreed that teachers influence students directly and daily (Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld, & York, 1966; Bransford, Brown, & Cocking, 2000), and Harris and Jones (2010) noted that "collaborative routines among teachers are an important component in securing improved student learning outcomes" (p. 173). With this in mind, it stands to reason that PLCs may represent a critical component to improving overall instruction and, therefore, student outcomes. The PLC model focuses on student achievement through teacher collaboration and community, and it is not limited to a specific group but includes the larger organization of the school (Blankenship & Ruona, 2007).

Louis, Marks, and Kruse (1996) established the following five conditions necessary to support the establishment of a PLC:

- time for teachers to collaborate and share ideas;
- positioning of teachers in proximity to visit classrooms and interact;

- supporting of teachers to feel empowered and autonomous to support students in their classrooms;
- development of avenues for communication so teachers can discuss issues regarding teaching or other areas of professionalism; and
- development of opportunities for teachers to share best practices and possibly engage in collaborative instruction.

The structure of a PLC is also conducive for cultivating technology self-efficacy among teachers. Learning about technology within the confines of a PLC allows teachers to engage in a hands-on approach in a face-to-face environment that provides collegial support and connectedness. PLCs support distributed cognition, because "knowledge is distributed across individuals, contexts, and resources" (Curwood, 2013, p. 89). In other words, in contrast to professional development based on the presentation of technology models to a large group of teachers, teachers within a PLC are allowed opportunities for vicarious learning and mastery through observation and hands-on activity, scaffolded support, and reflection regarding how knowledge attained can be transferred to the classroom (Bandura, 1977; Ranieri et al., 2018; Vygotsky, 1978).

Teachers involved in PLCs can help establish a school structure that positively influences teacher knowledge and promotes learning, student success, and advancement for the future. School leaders need to consider the future of education and invest in the knowledge capital of their teachers by providing opportunities for professional development that supports learning and structure to influence collegiality and advancement of professional practice.

PLCs also provide a platform for teachers to take ownership of their pedagogy and influence each other as practitioners. Opportunities for teachers to come together as a community are crucial to support their continued growth. Although teaching is a people-driven profession, teachers have tended to be very isolated within their school environments (Hadar & Brody, 2010). Isolation can be viewed as both "restrictive and protective" (Hadar & Brody, 2010, p. 1650) and does not allow for communication, collaboration, or intellectual stimulation. At the time of writing, one third of new teachers would leave the teaching profession within the third year of teaching, and lack of support was the most prominent reason for their leaving (Carroll, 2005). Support can be through a community of educators, or it can be through mentoring and coaching teachers to advance the instruction and develop innovation in the classroom. Regardless of the professional development implemented in a school, there has been a need for more focus on what teachers learn and how it applies to the authentic classroom environment. PLCs provide the external domain to support sustained and continuous interactions between teachers that establish supportive and ongoing relationships for the salient outcome of instructional growth (Hadar & Brody, 2010). As Clarke and Hollingsworth (2002) asserted, change that leads to growth needs to be ongoing. PLCs provide the external domain to nurture and promote lasting change for sustainable teaching practices. Girvan et al. (2016) showed that the peer-to-peer support offered through the context of a PLC positively influenced teacher attitudes toward educational innovation and reform because it provided a platform for teachers to discuss concerns, share strategies, and provide emotional support.

Professional Learning Communities and Media Literacy

The Partnership for 21st Century Learning (2010) supported the implementation of PLCs as a form of professional development for teachers to model instructional practices that support media-literacy skills such as creativity, communication, collaboration, and critical thinking. To study PLCs in relation to digital and media literacy, Curwood (2013) focused on teachers within a U.S. high school and their participation in professional development to encourage and support their proclivity to use digital tools. Curwood hypothesized that the use of digital tools within the classroom would directly correlate with teachers' beliefs about technology and their practices and skills to use it.

Five English teachers participated in Curwood's study, and four out of five described themselves as novice technology users. Teachers engaged in a PLC in which meetings took place bimonthly throughout the school year. Curwood stated that although teachers were interested in hands-on activities for learning about technology, they found the areas of implementation, design, and assessment to be more challenging. Curwood noted that the teachers used the PLC in a variety of ways; teachers not only discussed the design of lessons to support media literacy but also shared student work. Curwood also noted the importance of teachers connecting their curriculum knowledge with the use of digital tools. At the first PLC meeting, Curwood posed the question, "When your students leave your classroom at the end of the year, what skills, values, dispositions or knowledge do you want them to have?" (Curwood, 2013, p. 91). He specifically left out the word *technology*, which required teachers to consider how technology could be a tool within their learning context and not the focal point. This approach was vital to avoiding a

technocentric attitude toward instruction in which the focus is on the technology itself rather than student use of the technology (Harris & Hofer, 2009). Teachers must connect their content knowledge with technology to view it as relevant for learning.

Curwood's example of a PLC for media literacy showed that through guided practice and teacher-to-teacher support, technology was integrated and contextually grounded for instructional use. His results were consistent with those of Ranieri et al. (2018), who recommended that media-literacy training for teachers include the transfer of content knowledge, engagement in face-to-face meetings, and guided exploration with digital tools. The next section addresses the importance of technology professional-development opportunities that influence the personal domains of self-efficacy and beliefs of teachers.

Media Literacy and Technology Integration: Teacher Support and Development

According to Psiropoulos et al. (2014), professional-development opportunities that allow teachers to coach, mentor, and engage in face-to-face sessions are the "most powerful means of enhancing instructors' technological development" (p. 222). If teachers can observe others succeeding with technology, then instructional practices can change based on influence and role modeling from others. Through professional development that includes opportunities for collaborative learning, teachers feel that they can access these support systems in the future to expand their inclusion of technology for instruction and build their self-efficacy.

Hobbs and Coiro (2016) examined how collaborative professional development influenced motivation to integrate media literacy and technology among teachers who participated in the Summer Institute in Digital Literacy and the Graduate Certificate in

Digital Literacy at the University of Rhode Island. Hobbs and Coiro focused on developing dyadic partnerships between teachers, who would engage with each other and collaborate with other teachers within the larger group. The program took place over a 6-day period and included 165 participants. The members of each dyad developed a project to show their knowledge of digital tools "in the context of authentic and situated learning" (Hobbs & Coiro, 2016, p. 624). The researchers also discussed how the teachers' isolated environment was not conducive to creativity and networking for innovative instructional practices. According to Hobbs and Coiro, the use of a dyad within a larger group context forced teachers to reflect on their attitudes toward collaboration and created a necessary tension during which partners challenged, supported, and motivated each other to develop new ideas and instructional practices. Because the goal of the dyad was to create a media-literacy project that was authentically part of the members' content areas, teachers felt motivated by a high level of autonomy and satisfaction through participation.

According to Hobbs and Coiro (2016), the program allowed the teachers time to explore and play with the digital tools, and others have shown that "unrestricted access and time to play" (Psiropoulos et al., 2014, p. 214) are the most critical factors impacting a teacher's technological knowledge and advancement. Hobbs and Coiro observed that the program established scaffolding and support by including a group of professionals who had the technological expertise to provide hands-on assistance and support if there were problems. The researchers commented that the professionals assisting the teachers wanted to be seen actively solving problems and demonstrating the reality that technology was challenging and unpredictable at times. This level of scaffolding by those

considered to have more expertise adhered to Vygotsky's (1978) zone of proximal development, because guidance was provided and teachers were supported to engage with new information and concepts. If teachers who lacked self-confidence and self-efficacy with media literacy or technology saw the researchers or other professionals facing problems, then perhaps it would instill in the teachers the idea that mistakes were permitted and working through technical problems was part of the process. The researchers stated that "no one yet has a complete understanding of the full scope of competencies required for participating in digital culture. We are all learning how, day by day" (Hobbs & Coiro, 2016, p. 628). This statement is similar to a statement by Considine et al. (2009), who said that "simply being surrounded by media does not necessarily mean we recognize or understand its content or intent" (p. 472).

Hobbs and Corio (2016) found that a dyad within a larger community learning environment similar to a PLC supported teacher training on media literacy by utilizing guided exploration of digital tools, face-to-face meetings to receive guidance and feedback, and opportunities for teachers to understand media in a way that improved self-efficacy. The teachers in their study were supported through the external domain of situated learning to reflect on their attitudes within the personal domain, which influenced the domains of practice and consequence.

Summary

Media-literacy education has the potential to improve student learning in a variety of ways, including enhanced critical thinking, problem-solving, and evaluation of information sources for credibility. However, development of these skills depends, in part, on teacher beliefs and attitudes, self-efficacy, and perceptions as well as on the level

of professional support provided to make media literacy contextually relevant and meaningful for curriculum adoption. Clarke and Hollingsworth (2002) recognized the importance of teacher learning, stating that "we must accord the same dignity and status to teachers' developing practices that we exhort them to accord to developing student practices" (p. 965). For these reasons, the intervention in my study included a 3-month professional-development opportunity in the form of a PLC to provide support for English teachers to engage with media literacy and technology relevant to their contextual needs to positively influence pedagogy and instructional practice. As previously stated, PLCs were already an established form of professional development at Appleton High School. However, teachers in the intervention study received not only professional development, including guided practice with media literacy, but also an opportunity to collaborate with colleagues to influence collegiality and professional support. The intervention combined both situated and social learning in the form of a PLC to professionally develop and support teachers' knowledge and awareness of media literacy and improve teachers' self-efficacy regarding technology use and instruction. As existing literature made clear, teachers need opportunities that are contextually relevant and allow for guided practice and collaborative learning.

Chapter 4

Intervention Procedure and Program Evaluation Methodology

This chapter describes the intervention involving implementation of a PLC to increase teacher competency and self-efficacy with media literacy for instruction. To support development of media-literacy skills, teachers must engage in instruction that provides students with opportunities to use technology as a tool for learning to promote cognition and active participation with media (Potter, 2004). However, the inclusion of instruction that promotes student awareness and transfer depends directly on teachers' beliefs regarding the influence of media and technology on student learning and achievement (Ertmer, 2005). Teachers will be motivated to engage with media literacy as an instructional component if they feel as though it is contextually relevant and applies to the learning needs of students (Swallow, 2015). Research reviewed in Chapter 3 suggested that many teachers wanted to use media literacy for instruction (Deal et al., 2010; Schmidt, 2012). Although interest is important, teachers need training and support to develop skills and self-efficacy around what constitutes media literacy, and successful implementation of pedagogy to cultivate media-literacy competencies requires training, support, and practice (McTavish & Filipenko, 2016).

The purpose of this mixed methods study was to build teacher competency and self-efficacy around media-literacy use through a professional development opportunity that supported training and provided collegial support through vicarious learning and opportunities for mastery (Bandura, 1977).

Research Questions

The following research questions guided this intervention:

- To what extent would implementation of the PLC align with the intended design?
- What is the level and quality of teacher participation in a PLC for media literacy?
- What are teachers' experiences participating in a PLC for media literacy?
- To what extent does a PLC on media literacy improve teacher competency with media literacy?
- To what extent does a PLC on media literacy change the beliefs and attitudes of teachers toward media literacy?
- To what extent does a PLC focused on media literacy improve teacher self-efficacy?

Intervention

This intervention study took place from October to December of 2018. Four English teachers, a librarian, and a senior project teacher participated in PLC meetings twice a month, and each session lasted for approximately 2 hours. Supplemental resource materials to support media literacy in the classroom were available through a Google Classroom course developed for the intervention. Teachers were encouraged at the conclusion of every meeting to introduce an aspect of media literacy to their students before the next PLC meeting. In early October, teachers in this intervention participated in a preintervention focus group which provided insights about their perceptions of a PLC that would include collaboration, support, supportive conditions specific to trust, and

relationship building impacting improvement of the school community. Food and time for socialization were components for every PLC meeting so that participants could mingle and develop relationships and collegiality (Hobbs, 2017a). Additionally, I recorded attendance at each meeting to monitor participation. In an attempt to lessen the threat of attrition, participants received gift cards at the end of the intervention as an incentive for participating and offering their time and effort.

Intervention Activities

The following sections provide an outline of the specific activities that supported the intervention for media literacy.

Meeting 1: October

For this first meeting, I welcomed participants and introduced the ITC who would be helping for the duration of the study. Teachers were also quickly refreshed regarding the overall purpose of the intervention and my study. Teachers were encouraged to apply media-literacy strategies in the classroom throughout the intervention. To make this component more structured, during the first 15 minutes of every PLC meeting teachers were asked to share their classroom experiences regarding the use of media-literacy strategies. Next, each teacher filled out a 28-question survey regarding competencies in media literacy (Simons, Meeus & T'Sas, 2017; see Appendix C) and two additional brief surveys regarding perceptions of self-efficacy with technology (Gibson & Dembo, 1984; see Appendix D) and attitudes and beliefs towards media literacy (The Media Education Lab, 2013; see Appendix E). After completion of the assessments, a didactic approach was implemented to convey information about media literacy through the use of a brief PowerPoint presentation. The information included the background and history of media

literacy, the separation between protectionism and empowerment, higher order versus lower order thinking skills (Bloom, 1956; Churches, 2008) and information regarding the six core principles of media literacy established by NAMLE (2007). Two specific elements of NAMLE's principles were highlighted for teachers: "Media messages are produced for particular purposes" (NAMLE, 2007, p. 3) and "Media and media messages can influence beliefs, attitudes, values, behaviors, and the democratic process" (NAMLE, 2007, p. 3). Teachers participated in a hands-on activity regarding the upcoming midterm election race for one of Virginia's U.S. Senate seats between candidates Tim Kaine and Corey Stewart. Teachers were asked to set up a Twitter account if they did not have one already. Once all teachers had access to Twitter, they were divided into either the Kaine or Stewart group and asked to use Twitter to search for the hashtags #TimKaine or #CoreyStewart, respectively. In their search, teachers were asked to organize the comments based on whether they came from the official campaign or other Twitter users; whether comments were negative, positive, or neutral; and the specific claims made for or against a candidate. After collecting the data, teachers worked in their groups to research claims using an advanced Google search, Google News search, Google Scholar, Politifact.com, or Factcheck.org. After teachers had had time to collect data, they discussed the findings relevant to their candidate with the larger PLC group. After the discussion, teachers reflected on why this would be a valuable media-literacy lesson for students to support the evaluation of sources for credibility, critical thinking, and media analysis. Teachers were also prompted to brainstorm other ways Twitter and media literacy could be integrated into the English classroom for instruction. To provide inspiration, teachers viewed a YouTube video entitled "Using Twitter in the High School

English Classroom" (Meehan, 2016) that showed how Twitter can support student understanding of literature and provide new perspectives and opportunities for student collaboration. The Google Classroom course provided the teachers with supplemental step-by-step directions and guidance on how the Twitter lesson featured in the meeting could be implemented into the classroom along with additional resources regarding the implementation of Twitter in the English classroom.

Meeting 2: October

In this session, teachers contributed to identifying an appropriate social media tool for use by the group, reviewed the lesson from Meeting 1, and learned another strategy for integrating media literacy. An online learning network represents one way to support teachers professionally to advance their practice and influence each other to be innovative and reflective (Sack-Min, 2016). Teachers' use of a social media platform was privatized to keep teachers' conversations and postings confidential and exclusive to the PLC. Teachers were offered two options regarding a social media platform: Instagram or Facebook. I selected these social media platforms because they allowed participants to receive direct messages. Meeting reminders and tips for implementing media literacy in the classroom were sent to participants via direct messages throughout the intervention. If no majority vote could be attained for one platform over another, then more than one platform might have been used. Next, I briefly recapitulated information regarding media literacy covered in Meeting 1. To expand upon the information presented in the previous session, teachers were provided with an additional way to bring media literacy into the classroom using documentary film. The focus was another element of the NAMLE (2007) principles, "All media messages are 'constructed'" (p. PP). Using information

from the book *Reading in the Reel World: Teaching Documentaries and Other Nonfiction Texts* (Golden & Costanzo, 2006), teachers viewed assorted documentary clips and discussed, as a group, elements relating to media literacy such as ethos, pathos, logos, point-of-view, purpose, audience, interpretation, and message construction. Teachers discussed how using documentary film to integrate media literacy could cultivate the development of student analysis and critical thinking skills (NAMLE, 2007; Potter, 2004; Semali & Pailliotet, 1999). Students may watch documentaries but are often unaware of "the devices or conventions in the telling of these stories" (Semali & Pailliotet, 1999, p. 12). As a culminating activity to this meeting, teachers were asked to think about the elements of media literacy discussed and other documentary films that could be used with students. Through Google Classroom, a list of documentary films, brief synopses, and linked trailers were made available to the PLC. As a debrief to the meeting's work, teachers participated in a think-pair-share (Kaddoura, 2013) and discussed how these films could support principles of media literacy for instruction and connect with their teaching content.

Meeting 3: November

At the beginning of the session, I focused on NAMLE's (2007) recommendation that media literacy is "the ability to access, analyze, evaluate, create and act using all forms of communication is interdisciplinary by nature" (para. 4). The ITC discussed and demonstrated how a digital tool like iMovie could support the tenet of creation in media literacy instruction. The work in this session leveraged teachers' prior knowledge of, and experience with, technology and their content area in the process of elaboration to

develop media-literacy instruction that includes digital tools (Kester, Kirschner, & van Merriënboer, 2004).

Each teacher formed a dyad with another teacher in the PLC. A dyad encourages teachers to reflect on their attitudes towards collaboration and create a necessary tension for partners to challenge, support, and motivate each other to develop new ideas and instructional practices (Hobbs & Coiro, 2016). Even though teachers would eventually share individually regarding their instructional idea, a dyadic relationship provided one-on-one support to aid in vicarious learning and mastery regarding technology use (Bandura, 1977; Brinkerhoff, 2006; Vygotsky, 1978). After the iMovie presentation, teachers used the following questions to brainstorm how they might use iMovie to support inquiry with students and address components of media literacy outlined by NAMLE (2007):

- What are 2-3 learning challenges in existing projects that the use of media and digital literacy might support?
- What are two to three questions that students might explore about a topic you are studying (Coiro & Hobbs, 2017, para. 4)?
- What are two to three ways you could use media literacy to provide different perspectives and engage students in critical thinking?
- What are two to three areas in your content where you could engage students in digital creation to support an aspect of media literacy outlined in the principles of NAMLE (2007)?

Teachers were asked to post their responses in Google Classroom individually but also to use the questions as discussion prompts with their dyadic partner. During the

conversations, I observed the participants and recorded notes regarding their dialogue and interactions.

Teachers reflected on their answers again at the beginning of Meeting 5, when they explored how iMovie could be implemented to support student inquiry and address components of media literacy outlined by NAMLE (2007).

Meeting 4: November

To start Meeting 4, I presented the Personal Digital Inquiry (PDI) Framework and Planning Worksheet (Appendix G) that acted as a graphic organizer for teachers to practice instructional implementation of iMovie to integrate media literacy. Teachers were presented with a PDI questioning tool (Figure 5) so that they could understand in more detail the four parts of the PDI framework.

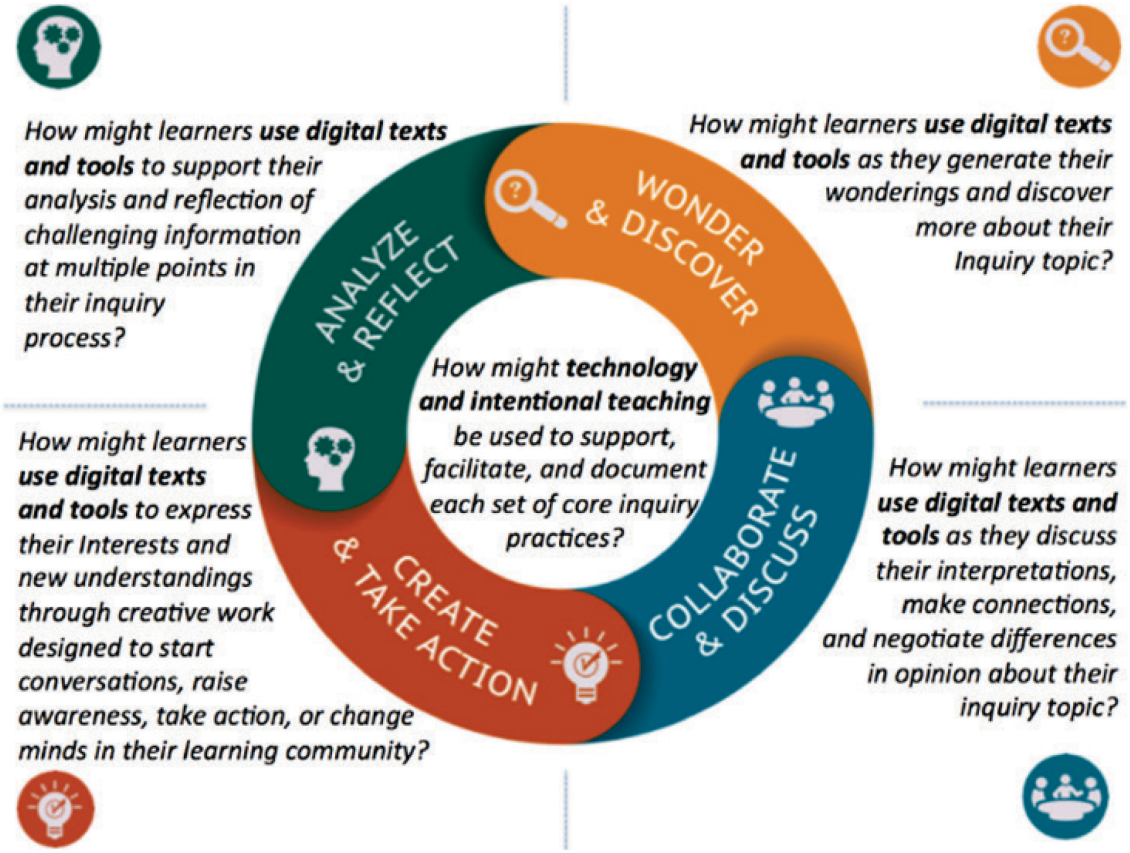

Figure 5. Personal digital inquiry questioning tool. From Coiro, J. & Hobbs, R. (2017). Personal digital inquiry (PDI) planning worksheet. Summer Institute in Digital Literacy 2017, University of Rhode Island, Providence, RI. Copyright 2017. Reprinted with permission.

As suggested in Chapter 3, digital tools grounded in content are vital to avoiding a technocentric approach to instruction, or "instruction focused more on the technologies used than on the students who are trying to use them to learn" (Harris & Hofer, 2009, p. 25). An overall goal for this meeting was to encourage teachers to consider cell phones as a technological tool that could support student learning. Research suggests that 95% of Americans aged 13–17 years used a smartphone (Anderson & Jingjing, 2018). Therefore, developing lessons that provided opportunities for students to transfer their multimodal skills from outside the classroom provided a relevant and authentic context for learning.

The ITC discussed how to download iMovie to a smartphone, editing procedures, and sharing student videos to Google Classroom. After this presentation, teachers engaged in a sample lesson using iMovie anchored with a specific media-literacy learning goal. In this sample activity, iMovie was implemented to create a public service announcement (PSA). As stated in Chapter 1, communication standards 11.1 and 11.2 of the Virginia SOL required students to use persuasive techniques relating to presentation skills to support a position by gathering evidence and counterclaims and using presentation technology. Instructional use of the PSA would address all areas of these communication standards. Additionally, this activity fulfilled the NAMLE (2007) principles because students would be required to think critically and inquire about a message, engage in creation through the use of a digital platform that is familiar and transferable, and address a diverse perspective or topic. Realistic content would make learning motivating and relevant to the lives of students by basing instruction in authentic situations (Sewell & Denton, 2011). For teachers to gain an understanding of how to use PSAs in their own context to support student use of media literacy and technology use, they were encouraged to experiment and actively engage to improve competence and self-efficacy. According to Psiropoulos et al. (2014), "unrestricted access and time to play" (p. 214) were the most critical factors impacting teachers' technological knowledge and advancement.

To begin the activity, teachers reviewed PSAs from The Ad Council and considered message construction, ethos, pathos, logos, audience, point-of-view, and purpose. Teachers also discussed the typical length of this media and considerd the importance of message brevity for impact. Next, teachers brainstormed and created a

draft list of information for PSA-type messaging that would be relevant to first-year students at Appleton High School. Possible messages included: coming to class on time, bullying prevention, cleaning up after one's self, or not parking in the teacher parking lot. Each teacher then worked with his or her dyad partner to write out a storyboard (see Appendix H) to show the layout of the proposed PSA and practice filming their storyboard idea using iMovie. The PSAs were to last no more than one minute. The teachers then returned to the classroom to edit their PSAs. After all PSAs were edited and complete, teachers showed their PSAs to the other members of the PLC, who used a PSA rubric (Appendix I) from the National Council for Teachers of English (2006) to provide meaningful feedback for peers, discussed the positive and negative aspects regarding the process of filming, and asked any questions. Teachers were also provided with further PSA supplemental materials (see Appendix H) and sample PSA videos from students.

In preparation for the next meeting, teachers were asked to view a lesson plan in the Google Classroom course that supported student creation of music videos using iMovie. Following the lesson plan, students would create music videos using iMovie to represent themes of *The Scarlet Letter* (Hawthorne, 1850/1988). Teachers were asked to reflect on how they could use this lesson with a novel they taught during the year to support the principles of media literacy. Teachers were asked to post one comment or question to the discussion board in Google Classroom regarding the lesson. Between PLC meetings, I used social media to remind teachers to view the lesson and post to Google Classroom. Finally, teachers were asked to bring a lesson plan to the next meeting that could be redesigned to include iMovie.

Meeting 5: December

To begin the session, the teachers, the ITC, and I reviewed the questions and comments posted to Google Classroom regarding the music video lesson plan using iMovie. During this time, the ITC and I answered questions and provided further guidance. Next, teachers reflected on their answers to the questions in Meeting 3 regarding how iMovie could be used to support student inquiry and address components of media literacy outlined by NAMLE (2007). Teachers were asked to consider how they could implement iMovie in their instructional practice to support media literacy. To begin, teachers introduced the PLC the lesson plans they had brought to the meeting and their initial ideas to include iMovie to support elements of media literacy.

To highlight the mechanisms related to how iMovie could support media literacy instruction, teachers utilized the Personal Digital Inquiry Framework Planning Worksheet (Appendix G) specific to the four areas of PDI: wonder and discover; collaborate and discuss; create and take action; and analyze and reflect (Figure 5). Teachers used the questions featured in the planning worksheet as conversation starters with their dyad partners to brainstorm ideas for their lesson and begin construction of a new lesson idea. The ITC and I moved around room providing feedback and assistance. Each teacher was responsible for filling out his or her own planning worksheet to develop an individual instructional plan using the selected digital tool. Teachers used the majority of the session to work on their instructional plans.

After approximately 45 minutes, individual teachers presented to the PLC regarding their instructional approach using iMovie based on the PDI framework. Teachers displayed their planning worksheets on a SMART Board in the classroom so

that members of the PLC could experience a visual and oral narration of the proposed instructional plan. If a teacher's instructional plan was not finished, the teacher verbally outlined his or her ideas regarding its completion. Teachers within the PLC then offered oral feedback to the presenter. Presentations and feedback took up the remaining time of the PLC meeting.

Meeting 6: December

In this session, teachers presented any remaining instructional plans to the PLC to receive feedback and all lessons were compiled into a shared document on Google Classroom for future access. Teachers then completed the post-survey regarding competencies in media literacy (Simons et al., 2017; see Appendix C) and the two additional surveys regarding perceptions of self-efficacy with technology (Appendix D) and attitudes and beliefs toward media literacy (Appendix E). Teachers were also asked to participate in follow-up one-on-one interviews to assess their perceptions and experience in the PLC to support media literacy. Teachers were thanked for their participation and presented with gift cards for their time and effort.

Summary of Timeline

Table 5 provides an overview of the activities for the intervention.

Research Design

I selected an embedded design for this study. Qualitative focus group questions took place before the study officially commenced in October 2018 to assess teacher's perceptions specifically related to supportive conditions and shared personal practice. According to Creswell and Plano Clark (2011), an embedded design would provide supplemental data that would "enhance the experimental design" (p. 92). I relied on

quantitative data to compliment the focus group, exit interviews, and exit tickets. The quantitative data supported the qualitative data that served as the primary data source. Data were collected from a convenience sample consisting of secondary English teachers and special education teachers who specialized in English. The design relied on a single subject pretest–posttest embedded design (Creswell & Plano Clark, 2011).

There are many strengths of a one-group, pretest–posttest design. Rossi, Lipsey, and Freeman (2004) supported a pretest–posttest design for "short-term impact assessments of programs" (p. 291), and my study took place for 3 months and included 10.5 hours of PLC meetings. Rossi et al. (2004) supported the pretest–posttest design as a way to "affect conditions that are unlikely to change much on their own" (p. 291). In considering stakeholders for this study, teachers at the high school had not been afforded opportunities by the school to learn about media literacy or digital tools (Wholey, Hatry, & Newcomer, 2010). The condition of professional development for teachers regarding technology had remained stagnant or unchanged within the county's schools, and the intervention could influence teacher self-efficacy through engagement with media literacy.

Table 5

Timeline of Intervention Activities and Data Collection

Meeting	Date	Data collection	Activities
Preintervention	September 2018	Qualitative: Focus group	Focus group discussion, observations, and notes.
1	October 2018	Qualitative: focus group. Quantitative: Competencies in Media Literacy survey (Simons et al., 2017). Quantitative: teacher self-efficacy survey (Gibson & Dembo, 1984). Quantitative: teacher beliefs and attitudes survey (The Media Education Lab, 2013). Quantitative: attendance records. Qualitative: teacher self-reported exit tickets regarding perceived barriers or supports, e.g., delivery of information and level of understanding.	Overview of media literacy. History and core principles of NAMLE (2007). Twitter activity to analyze media messages regarding candidates for U.S. Senate.
2	October 2018	Quantitative: attendance records. Qualitative: teacher self-reported exit tickets regarding perceived barriers or supports, e.g., delivery of information and level of understanding.	Social media platform. Documentary film analysis. Teacher think-pair-share regarding future media literacy instruction using documentaries.
3	November 2018	Quantitative: attendance records. Qualitative: teacher self-reported exit tickets regarding perceived barriers or supports, e.g., delivery of information and level of understanding.	Review of NAMLE (2007) principles. Establishment of dyad partners. ITC and presentation of iMovie. Brainstorming with dyad partner.

Meeting	Date	Data collection	Activities
4	November 2018	Quantitative-ongoing attendance records. Qualitative: teacher self-reported exit tickets regarding perceived barriers or supports, e.g., delivery of information and level of understanding. Qualitative: teacher comments or questions posted to Google Classroom.	Introduction of the PDI framework and questioning tool. Teacher exploration of iMovie. A hands-on activity with PSAs. Teacher presentation of PSA with feedback from PLC. Teachers view sample music video lesson using iMovie via Google Classroom in preparation for Meeting 5. Teachers post a question or comment to Google Classroom regarding the lesson in anticipation for the next PLC meeting. Teachers are reminded through social media in between meetings to reflect on the lesson plan and post a question or comment to Google Classroom.
5	December 2018	Quantitative: attendance records. Qualitative: teacher self-reported exit tickets regarding perceived barriers or supports, e.g., delivery of information and level of understanding.	Questions or comments regarding the music video lesson plan-Guidance provided by researcher and ITC. Work on PDI framework. Teachers share PDI framework of possible iMovie lesson with other teachers. Oral feedback and discussion within PLC.

Meeting	Date	Data collection	Activities
6	December 2018	Quantitative: attendance records. Qualitative: one-on-one interviews regarding changes in self-efficacy and teacher attitudes and beliefs towards media literacy. Quantitative: Competencies in Media Literacy survey (Simons et al., 2017). Quantitative: teacher self-efficacy survey (Gibson & Dembo, 1984). Quantitative: teacher beliefs and attitudes survey (The Media Education Lab, 2013).	Teachers share PDI framework of possible iMovie lesson with other teachers. Oral feedback and discussion within PLC. Distribution of incentives.

Note. ITC = information technology coordinator; NAMLE = National Association for Media Literacy Education; PDI = personal digital inquiry; PLC = professional learning community; PSA = public service announcement.

Data from the needs assessment indicated that professional development was needed to support teacher use of media literacy, and existing research suggested that workshop opportunities allowing for teacher-to-teacher support and modeling would be effective to promote self-efficacy (Hobbs, 2017a; Murphy, 2017; Psiropoulos et al., 2014). As a result of the design, it was possible to assess the research question posed regarding how the PLC provides support and community to improve teacher self-efficacy and competency with media literacy.

Process Evaluation

Baranowski and Stables (2000) defined program implementation as the "extent to which the program was implemented as designed" (p. 160). I assessed fidelity of this intervention with several measures including adherence, dosage, and participant responsiveness. Dusenbury, Brannigan, Falco, and Hansen (2003) stated that program implementation depends on the quality of implementation, dose, adherence to the program, participant responsiveness, and program differentiation. Program implementation aligns with the theory of treatment (Appendix J), because teachers attended sessions to gain knowledge regarding media literacy to increase the mediating variables of media literacy knowledge and self-efficacy (Byrne, 2009).

Process Measures

Process questions for the intervention are shown in Table 6*, and the measures used are summarized in*

Table *7*.

Table 6

Process Questions and Variables

Process question	Variables
1. To what extent did implementation of the PLC align with the intended design?	Adherence to program
2. What is the level of teacher participation in a PLC for media literacy?	Dose
3. What are participant experiences when engaging in a PLC for media literacy?	Barriers Supports Delivery of information Connectedness

Table 7

Measures and Associated Process Questions

Data	Frequency	Analysis	Question
	Qualitative		
Researcher field notes and administrative documents	Each meeting	Document analysis	1
Teacher responses using Google Classroom	Meetings 4 & 5	Responses deductively coded for themes	2
Exit ticket-open ended questions regarding delivery of information and perceived barriers and supports for understanding	Each meeting	Exit tickets deductively coded for themes	3
Focus group	Meeting 6	Notes deductively coded for themes	3
	Quantitative		
Attendance records	Each meeting	Descriptive statistics	2

The intervention focused on the elements of adherence to the program, dose, and participant experience and responsiveness, which are discussed in the following sections.

Adherence to the program. As previously mentioned, the intervention activities adhered to the timeline in Table 5. I recorded field notes after every PLC meeting as evidence of completed activities. Dusenbury et al. (2003) supported this method of self-reporting because it would provide evidence of "which activities were taught and, for the ones taught, how many achieved the objectives that were stated in the curriculum" (p. 241). Any notable variation in the program's implementation would put the internal validity of the intervention at risk.

Dose. Dusenbury et al. (2003) stated that dose can be measured by the number of completed sessions accompanied by a record of teacher attendance or logs. To measure how much of the intervention participants receive, I recorded attendance for every meeting. Attrition was a concern, because all meetings took place after school. Because there were few participants, it was critical to maintain the sample population.

Participant experience and responsiveness. Attendance and participation were critical to the success of this intervention. Teachers in the intervention were encouraged to provide answers to open-ended questions in the form of an exit ticket (Appendix M) after every meeting except for Meeting 6. The ticket assessed their overall experience, including perceived barriers and supports for understanding the information presented and connecting with others in the PLC. Participant barriers could include comfort level regarding collaboration and perceived competency with technology. Supports could include collective learning opportunities and guidance for technology implementation. Exit tickets have also been referred to as student response systems. Sprague (2016)

supported the use of exit tickets, because they provide immediate feedback to the facilitator and provide an accurate picture of whether students understand or misunderstand the information presented. Teachers also participated in follow-up one-on-one interviews during the last meeting of the intervention to assess whether their perceptions changed regarding involvement in a PLC to support media-literacy instruction. The interviews specifically investigated perceptions related to collaboration, support, and problem-solving; supportive conditions specific to trust, relationship building, and respect; and shared vision and values.

Outcome Evaluation

It is important for a researcher to know what construct domains can change based on the treatment provided (Leviton & Lipsey, 2007). As the theory of treatment (Appendix J) indicated, the long-term outcome of this intervention was to influence teacher implementation of media literacy for instruction and student outcomes. However, to achieve this long-term outcome, the initial short- and medium-term outcomes of the intervention, as indicated in the logic model (Appendix K), included increasing teacher knowledge, self-efficacy, and competency with media literacy (Hobbs, 2017a). According to Yoon et al. (2007), opportunities for teachers to engage in prolonged instead of episodic opportunities for professional development have the potential to support change in classroom practices. Therefore, the intervention relied on a long-term view of professional development that initially included six PLC meetings over 3 months and an online component to cultivate discussions and relationships beyond the face-to-face meetings. This approach may have contributed to increasing teacher self-efficacy and

competency with media literacy and provided an opportunity to implement an effective framework to support instructional practice.

Participants

According to Dufour, Dufour, and Eaker (2008), a PLC should have a maximum of six participants. There were 23 teachers within the English department at Appleton High School, including special education teachers who cotaught English. From this sample, I planned to recruit English teachers and special education teachers who exclusively cotaught English. Teachers in this department had established close relationships. This may have further supported community building within the group. However, actual participants in the PLC included four English teachers, a librarian, and a senior project teacher. In addition, a retired ITC from the county assisted with facilitation to support fidelity of implementation when digital tools were used. I met with the ITC before the intervention to discuss the program design and his role as a facilitator.

Recruitment

At the first meeting of the English department, teachers were informed of the intervention study and its purpose. The discussion provided information on the time requirement and the gift card incentive for participating. Interested teachers used a sign-up sheet to express their interest and willingness to participate and were contacted after the meeting with a scripted e-mail correspondence. Once a teacher confirmed via e-mail his or her interest in participating, a formal electronic consent was sent.

Outcome Measures

Outcome evaluation questions and variables for the intervention study are shown in Table *8*. Table *9* summarizes the measures used for these variables.

Table 8

Outcome Questions and Variables

Outcome question	Variables
1. To what extent does a professional learning community focused on media literacy improve teacher competency with media literacy?	Teacher competence with media literacy
2. To what extent does a professional learning community focused on media literacy change the beliefs and attitudes towards media literacy?	Teacher attitudes and beliefs towards media literacy
3. To what extent does a professional learning community focused on media literacy improve teacher self-efficacy?	Teacher perceptions of self-efficacy with media literacy

Teacher Competencies in Media Literacy

I assessed teacher levels of perceived competency with media literacy using the Competencies in Media Literacy survey (Simons et al., 2017; see Appendix C). Simons et al. developed this 28-question Likert-scale survey to measure the personal competencies of teachers with media literacy and their pedagogical skills to impart media-literacy skills to learners. The researchers stated that "if teachers are to provide their learners with effective media education they should: a) be sufficiently media literate themselves, and b) have the required competencies to promote media literacy among learners" (Simons et al., 2017, p. 110). Example statements within the survey that measured the personal competencies of teachers with media literacy included "I can consciously choose between different media devices, based on their function (e.g., computer, smartphone or tablet, navigate through hyperlinks)" (Simons et al., 2017, p. 108) and "I can create media content (e.g., write an article, create a photo or video document, set up a blog)" (Simons et al., 2017, p. 108).

Table 9

Measures and Associated Outcome Questions

Data	Frequency	Analysis	Questions
	Qualitative		
Teacher observations	Each meeting	Observation notes coded for themes	1
One-on-one interviews	Meeting 6	Interview notes coded for themes	2 & 3
	Quantitative		
Pretest and posttest of teacher competencies in media literacy survey (Simons et al., 2017)	Meetings 1 & 6	Appropriate difference in means	1
Pretest and posttest of teacher attitudes and beliefs towards media literacy (The Media Education Lab, 2013)	Meetings 1 & 6	Appropriate difference in means	2
Pretest and posttest of perceived teacher self-efficacy with media literacy (adapted version of the Teacher Efficacy Scale, Gibson & Dembo, 1984)	Meetings 1 & 6	Appropriate difference in means	3

Statements that measured the pedagogical skills of teachers to impart media literacy to students included "Learners can purposefully use different sources of information and media devices (e.g., search for information using social network sites, the internet)" (Simons et al., 2017, p. 109) and "Learners can evaluate media content taking into account various criteria (e.g., accuracy of information, comparison of information, appreciation of aesthetic aspects)" (Simons et al., 2017, p. 109). This formative assessment was used to assess teachers' feelings of competence at the beginning and end of the intervention to measure change. Media literacy experts reviewed the instrument to establish its validity (Simons et al., 2017). A pilot study with

teachers and preservice teachers assessed question content and delivery, and it was used with a larger study of 460 teachers and 220 student teachers.

I also observed teacher competency during PLC meetings. I deductively coded my notes based on themes from the survey of Simons et al. (2007), which were as follows.:

- Media creation: The participant can create media content and present it to others and feels competent helping learners create media content and present it to others.
- Media communication: The participant can communicate using media, including social media and other online platforms, and uses media to communicate with students through use of a computer, tablet, smartphone, or SMART Board. The participant feels competent in helping learners communicate and present content using media.
- Media participation. The participant actively engages in media to support certain organizations or political establishments and feels competent in showing learners how they can participate in a public forum for social or political reasons.
- Participant awareness: The participant is aware of how media messages are tailored to fit certain audiences and how media production works and influences facets of democracy.
- Media evaluation: The participant is aware of how to evaluate media for credibility, implicit versus explicit messages, purpose, audience, and

message bias and feels competent helping students to evaluate media for these features.

Teacher Attitudes and Beliefs Toward Media Literacy

To support media literacy as a component of instruction, there needs to be a concentration on how teacher beliefs regarding media and technology impact pedagogy and how professional development sustains teachers to improve and evolve their practice for the future. I assessed teacher beliefs and attitudes toward media literacy and technology for instruction through one-on-one interviews (see Appendix N) and deductively coded my note for themes. The Digital Learning Horoscope Questionnaire developed by The Media Education Lab (2013) uses 5-point Likert scales (*very important* to *not important*) that measure teachers' "attitudes towards technology tools, genres, and formats; message content and quality; community connectedness; texts and audiences; understanding media systems; and learner-centered focus" (Hobbs & Moore, 2013, p. 7). Instrument reliability was established through a study of teachers in seven different regions of Turkey ($N = 2936$), including teachers with a language-arts content specialization ($n = 724$). Construct validation was established regarding one particular measure relating to another measure "consistent with theoretically derived hypotheses concerning the concepts (or constructs) that are measured" (Carmines & Zeller, 1979, p. 23). The instrument comprised 48 items and asked teachers to respond to belief statements such as "Too many people are ignorant about alternative media found in some magazines, music, and movies" (The Media Education Lab, 2013, para. 22) and "If I'm not familiar with students' popular culture, they will think that I'm not really connected to their lives" (The Media Education Lab, 2013, para 19).

Teacher Self-Efficacy for Media Literacy

Self-efficacy is influenced by opportunities for collaborative work and vicarious learning (Bandura, 1977; Brown et al., 1989). Teachers within the intervention were supported to use technology in the PLC environment so as to support achievement and confidence in a low-threat environment. Gibson and Dembo (1984) suggested that self-efficacy is "teachers' evaluation of their abilities to bring about positive student change" (p. 570). To measure changes in teacher self-efficacy with media literacy, teachers completed an adapted version of the Teacher Efficacy Scale (Gibson & Dembo, 1984) that utilized 6-point Likert scale (*strongly agree* to *strongly disagree*) and comprised 14 items. Teachers completed the scale at the beginning and end of the intervention. I also measured teachers' changes in self-efficacy through the one-on-one interviews at the end of the intervention and deductively coded my notes for themes (Appendix N). During the interviews I asked teachers about their feelings of self-efficacy regarding media literacy and their ability to impart media-literacy skills to students. I also asked teachers about their application of media literacy within the classroom context and whether they perceived changes in student learning and engagement.

Data Collection

Because this study had a mixed method design, it involved both quantitative and qualitative data collection. Qualitative data included observation of teacher interactions (Appendix O) during PLC meetings and the thematic coding for exit tickets from PLC meetings. I collected additional qualitative data from focus group discussions before the intervention and one-on-one interviews during the final PLC meeting. I thematically coded my notes from the focus group and interviews. Quantitative data included

measures of attendance records and survey data regarding teacher competencies, self-efficacy, and attitudes and beliefs. Data were gathered from the week of October 1, 2018, to the week of December 10, 2018.

Data Analysis

The analysis of collected data reflected the types of data required for a mixed method design. Analyses included quantitative methods with descriptive statistics, appropriate tests of differences in means, and other measures relevant to addressing the research questions. Additionally, data analysis for this study included a priori coding of qualitative data, development of themes from the coded data, and, finally, a mixing of the quantitative and qualitative data to create a clearer picture of what changes occurred during the intervention and how and why teachers experienced these changes.

Statistical Tests

I entered data into SPSS (Version 25) and cleaned it. I calculated descriptive statistics for the surveys on self-efficacy, beliefs and attitudes, and competence (Gibson & Dembo, 1984; The Media Education Lab, 2013; Simons et al., 2017). Additionally, I used a difference-of-means test to assess teacher self-efficacy, beliefs and attitudes, and competence before and after the intervention to detect any change.

Qualitative Data

I uploaded data from the focus group, interviews, exit tickets, and observations to NVivo (Version 11) for deductive coding. Deductive coding establishes predetermined codes before analyzing the data to "enable an analysis that directly answers your research questions and goals" (Saldana, 2016, p. 71). I deductively coded exit tickets for predetermined themes regarding barriers and support for information presented during the

intervention and connection with others within the PLC. I deductively coded focus group data using the predetermined themes of collaboration, support, supportive conditions specific to trust, and relationship building impacting improvement of the school community. I deductively coded interview data with respect to changes in teacher self-efficacy and attitudes and beliefs. Finally, I deductively coded observations of teacher competency within the PLC sessions to identify the predetermined themes of media creation, communication, participation, awareness, and evaluation.

Chapter 5

Findings and Discussion

This dissertation aimed to examine how, and the extent to which, participation in a professional learning community (PLC) changed secondary teacher competency, attitudes and beliefs, and self-efficacy associated with media. The intervention included sessions and activities to build teacher competency and self-efficacy, and cultivate collegial relationships through opportunities for hands-on learning and engagement. This study employed a mixed method design to evaluate the intervention based on the following research questions:

RQ1: To what extent did implementation of the PLC align with the intended design?

RQ2: What is the level and quality of teacher participation in a PLC?

RQ3: What are teachers' experiences participating in a PLC?

RQ4: To what extent does a PLC improve teacher competency with media literacy?

RQ5: To what extent does a PLC change the beliefs and attitudes of teachers towards media literacy?

RQ6: To what extent does a PLC focused on media literacy improve teacher self-efficacy?

The PLC included six teacher participants, two Caucasian males, one African American male, and three Caucasian females. The group included a Senior Project teacher, librarian, and four members of the English department. To accurately assess participant perceptions of a PLC to support media literacy, teachers participated in an

initial focus group before meeting one to discuss the current state of PLCs at Appleton High School including collaboration, support, conditions to cultivate trust, and relationship building to impact improvement of the school community.

Initial Focus Group Perceptions of a PLC to Support Teacher Learning

During this focus group, all participants were present except for Participant One. The themes that emerged included the PLC structure, time for teachers to learn, and space to observe other teachers teaching and learning.

Structure of PLC meetings. Participants defined structure of PLC meetings to include pre-established norms set by participants, an awareness of what a PLC was and its use, an agenda for meeting activities, and an established leader who would aid in facilitation (Participant 4, personal communication, October 2018; Participant 6, personal communication, October 2018). The participants discussed the importance and value of structure within a PLC. While many participants selected a PLC that reflected their teaching and learning interests, there was a need for structure within the PLC that cultivated teacher engagement in the activities. For example, Participant Four discussed her experience at a school prior to Appleton High School, stating, “One of the focuses of our faculty meeting was to go through and define this is a PLC, this is the research on it, this is why we do it, these are the specific roles, and then we were told this is modeled and this is what your PLC, these are our expectations. It gave us the research, but it was very, very structured” (Participant 4, personal communication, October 2018). In response to this pre-defined structure, Participant Three compared her experience at Appleton High School within her PLC, stating, “In ours, definitely, there was no structure and there ended up being side bar conversations, people talking here and you're interested

in what was going on over there but somebody got conversation here. I would've appreciated some more structure" (Participant 3, personal communication, October 2018). Participants noted that autonomous selection of a PLC was part of the overall structure for teacher participation at Appleton High School. Within the past two years at Appleton High School, teachers had been allowed to join a PLC of choice based on a particular interest. The participants regarded this level of autonomy as a positive step:

> It's hard to dedicate time to something you can't see being used. I think maybe having choice groups hopefully will make it more useful. I guess it goes back to the buy-in of people really feeling like it's something worth doing versus something you have to do. (Participant 6, personal communication, October 2018)

Even though providing teachers with autonomy to choose their PLCs was discussed as a way to enhance engagement, an overall lack of time and administrative support impacted opportunities for teachers to observe and learn from each other.

The teacher learning environment: Support, time, and space. Teachers discussed that while they felt an element of support within their PLCs, there was a need to make teacher support more of a priority within Appleton High School. Teachers perceived PLC meeting times as beneficial to discuss an area of interest and engage with colleagues, but these times were limited. In response to the question "Do you think teachers supporting each other makes a difference in instructional practice and morale? Why or why not?" Teachers were affirmative that relationships with other teachers were necessary for support. To establish supportive conditions, teachers discussed the need for administrative supports to allow time for teachers to engage and visit each other's classrooms to observe best teaching practices. While participants did recognize that

administration provided designated meeting times throughout the year for PLCs to meet, Participant Three stated, “It's helpful that there are times carved out for it, but I don't think it's sufficient time” (Participant 3, personal communication, October 2018). Participant Six also commented on time for teachers to meet, stating, “I think sometimes the face-to-face becomes more difficult, especially in high school. Our schedules are so different and the planning, obviously, there's no common planning (Participant 6, personal communication, October 2018).

When pre-intervention focus group data was compared with exit tickets collected from participants after meetings, many participant requests or desires for the facilitation of PLC meetings were addressed during the intervention. Data collected from exit ticket one suggested that structure needed to be more of a priority in meetings, as one participant stated:

> People talking over people; people who were operating at a different level lost some of us who were trying to follow the published steps. Perhaps we need some ground rules for discussion. Instruction and explanations were going on in different places and were difficult to follow (Exit ticket, October 2018).

Due to this response, I increased my attention towards improving the facilitation of participant discussions to ensure that information was received and understood during PLC meetings. There were no other reported instances of issues regarding structure.

Teachers had autonomously chosen to participate in the PLC, and approximately two hours of time was allotted twice a month for teachers to engage with each other and discuss implementation of media literacy. While teachers discussed administrative support in the focus group to be able to visit each other’s classes and observe best

teaching practices the PLC provided opportunities for teachers to share and observe. Participants stated in exit tickets, “Today's session was informative in various ways. Learning how to use Twitter effectively in my instruction will certainly help me onward. In addition, I found the discussions that occurred amongst my group members was insightful as well” (Exit ticket, October 2018) and “I appreciated seeing how people use media in their classrooms” (Exit ticket, October 2018). Participant desires for PLC meetings were addressed within the implementation of the intervention. The following discussion explores the process of implementation as it represents the first step in attributing outcomes to the implemented intervention and measures the “extent to which the program was implemented as designed” to include dosage, reach, and fidelity (Baranowski & Stables, 2000, p. 160). Examining components of the intervention process contributes to understanding why and the proposed intervention may or may not contribute to changes in expected outcomes. (Linnan & Steckler, 2002).

Implementation of the PLC and Alignment with the Intended Design

The first research question focused on the implementation of six PLC meetings over a three-month period. While the components of the intended design remained almost the same, there were variations in delivery of information due to time constraints and participant absences. Table 10 shows differences in implementation and the italicized text and strike through represent additions and deletions, respectively, to the original implementation design.

Table 10

Actual Design for Implementation

When	Activities
~~September 2018~~ October 2018 Pre-intervention	Focus group -Discussion observations and notes
October 2018- Meeting 1	Overview of media literacy and history and core principles of the National Association for Media Literacy Education (NAMLE) (2007) Twitter activity to analyze media messages regarding candidates for U.S. Senate
October 2018- Meeting 2	Social media platform Documentary film analysis *Film teacher within the English department presents on handouts used for analysis* Teacher think-pair-share regarding future media literacy instruction using documentaries
November 2018- Meeting 3	Review of NAMLE (2007) principles Establishment of dyad partners Information technology coordinator (ITC) and presentation of iMovie Brainstorming with dyad partner *Teachers view sample music video lesson using iMovie*
November 2018- Meeting 4	Introduction of the personal digital inquiry (PDI) framework and questioning tool Teacher exploration of iMovie A hands-on activity with public service announcements (PSAs) ~~Teacher presentation of PSA with feedback from PLC~~ ~~Teachers view sample music video lesson using iMovie via Google Classroom in preparation for meeting 5~~ Teachers post a question or comment to Google Classroom regarding the lesson in anticipation for the next PLC meeting Teachers are reminded through ~~social media~~ email in between meetings to reflect on the lesson plan and post a question or comment to Google Classroom
December 2018- Meeting 5	~~Questions or comments regarding the music video lesson plan Guidance provided by researcher and ITC~~ ~~Work on PDI framework~~ Teachers within the PLC work collaboratively as a group on one PDI framework and engage in discussion ~~Teachers share PDI framework of possible iMovie lesson with other teachers~~ Oral feedback and discussion within PLC
December 2018- Meeting 6	~~Teachers share PDI framework of possible iMovie lesson with other teachers~~ Teachers complete PDI framework as a group Oral feedback and discussion within PLC Distribution of incentives

The following discussion includes examples of the changes made during the intervention regarding participant buy-in and levels of engagement. Challenges with participant buy-in emerged during the implementation of documentary film to integrate media literacy. Teachers learned how documentaries could teach elements related to media literacy including ethos, pathos, logos, point-of-view, purpose, audience, interpretation, and message construction. Out of all participants, I perceived Participant One as a potential distraction to the intervention's goals and mission. While he expressed interest in being a part of the intervention, his unsolicited commentary distracted other participants from focusing on the media literacy activities presented. I presented an assortment of documentaries and examples of how they could be used for instruction, and I wanted to recognize the expertise of Participant One, a film teacher within the English Department at Appleton High School. I felt as though I needed to give Participant One an opportunity to engage in the community discussions to increase his buy-in and focus during the PLC. As a result of Participant One sharing his expertise on film, his engagement and support of the other PLC members increased, and his involvement in future activities seemed more authentic and positive as opposed to skeptical. Participant One did not compromise the integrity of the intervention. Instead, the delivery of a meeting within the intervention was slightly altered in order to explore whether the participant input during intervention activities increased buy-in (Linnan & Steckler, 2002).

A social media platform was introduced as a way to communicate outside of PLC meetings and to post instructional ideas and examples of media literacy use in the classroom. I presented Facebook or Instagram as possibilities because I could send out

direct messages. While participants understood how a social media platform would be used during the intervention, none of them showed any enthusiasm for its use. Participant One asked if Twitter might be a possibility instead of Facebook or Instagram, and while participants had set up Twitter accounts during meeting one, there was trepidation regarding security and who would be able to see the messages. The discussion regarding security and social media became more involved, and many participants expressed concern regarding its use. After session two, an email to participants asked if the group could come to a consensus about using a social media platform, but no one ever replied to my email and a platform was never used.

Level and Quality of Teacher Participation in a PLC for Media Literacy

Level and quality of participation were evaluated based on participant attendance as well as active engagement and collaboration during PLC meetings. Data on attendance from each of the PLC meetings revealed that only half of the meetings (3 out of 6) included all participants ($n = 6$). Absences resulted mostly from either sickness or family obligations and even with the short duration of this PLC, meeting twice a month for three months, time constraints represented a barrier to full participation.

Changes to support the quality of teacher participation became a focus as teachers were attending meetings after school and using their free time. I wanted to make sure the information presented for the intervention was both applicable to their teaching contexts and included opportunities for hands-on learning and engagement. Therefore, I integrated the music video example into PLC meeting three instead of a follow-up activity between sessions four and five. Even though I felt that the ITC would adequately prepare information to give participants regarding iMovie, the visual example that showed

participants how the pieces came together for instruction was missing. After teachers were given information about iMovie, I presented the assignment sheet for the music video lesson, the rubric, and analysis activities used with example music videos to build on students' prior knowledge and provide opportunities for scaffolding. While participants were actively engaged in discussions regarding the music video lesson and appreciated the supplemental materials and student examples, opportunities for participants to create using media did not prove positive as illustrated in an activity for teacher creation of public service announcements (PSAs).

Discussions regarding the use of iMovie for implementation of media literacy continued throughout PLC meetings, and PSAs were discussed as a way for students to think critically, inquire about media messages, and engage in creation using a digital platform while also addressing the communication standards of the Virginia standards of learning. Even though participants were again presented with supplemental materials, a rubric, and student-constructed examples, participants did not positively respond when asked to participate in a hands-on activity to create a PSA. Up until this point, teachers had been presented with different examples and supplemental materials for how iMovie and media literacy could be diffused into the classroom, but this was the first time they had been asked to physically engage to create using iMovie. It took a considerable amount of time for the groups to come up with an idea that would fit the PSA requirement and at the end of the meeting the PSAs remained incomplete.

Teacher Experiences in a PLC for Media Literacy

The first two research questions highlighted some of the intervention adjustments as well as the challenges time constraints create for facilitators and participants. Research

question three further explored the intervention through teachers' reported experiences to include barriers and supports in this media literacy learning community.

Perceived Barriers or Supports for Building Media Literacy Competency

During the intervention PLC participants noted through exit tickets a perceived barrier in that they felt unprepared to understand basic information about how a digital tool worked and in what capacity, without prior knowledge and experience. The intervention did not provide enough time for many of them to feel confident when considering future implementation of digital tools, "I have not used iMovie and would be worried about helping the students with using the program" (Participant, exit ticket, November 2018). The need for further opportunities to practice with iMovie for the implementation of media literacy was also illustrated by another participant who indicated that a lack of experience could potentially create a barrier for student learning, stating, "I think one of the barriers would be helping students use iMovie, but I know the more I practice it, the more confident I will feel" (Participant, exit ticket, November 2018).

Time also affected participant ability to do and complete work during PLC meetings and was most evident when participants were asked to create a PSA. As previously mentioned, throughout PLC meetings participants were presented with specific examples of media literacy lessons to include assignment sheets, rubrics, and student examples. When participants were asked to create their own PSA using iMovie skills acquired during the PLC, two of the participants left before the meeting ended for the day. Based on my observations, I inferred that these participants may have perceived this activity as too much work after a full day of teaching. As previously noted, the PSAs

were never completed by either of the groups and a participant noted in an exit ticket that the meeting aided in the ability to learn something new to influence instructional practice "assuming that my fellow teachers (i.e., students) understand what the assignment is, the timeline and product that is expected, and quality that is possible in these restraints" (Exit ticket, November 2018). Based on this response, there may have been possible issues regarding time and collaboration within the small groups for this activity. Additionally, teachers were asked to use Google Classroom to post ideas regarding how they would use iMovie in their classrooms. Towards the end of the intervention, only Participant Five had posted his idea for iMovie, and the rest of the participants failed to post. When I asked them about the lack of postings, they stated they forgot or were too busy and limited on time.

As data suggests, the perceived barriers to building media literacy competency for participants included a lack of prior knowledge and experience regarding digital tools and insufficient time to support collaboration in PLC meetings (Watson & Vaughn, 2006). Even though these limitations presented as obstacles for participants, a support that aided in the delivery of media literacy information included the opportunity to view completed model lessons. Participants stated, "Yes. It was helpful to see how Meg incorporated iMovie into a lesson" (Participant, exit ticket, November 2018) and "Yes, it is helpful seeing how classroom teachers teach classic literature with media literacy in the classroom" (Participant, exit ticket, November 2018). Participant One specifically noted the incorporation of a finished lesson as important for teacher learning as it provided scaffolding and direction, stating, "It's also kind of cool to get things that are ... that have been done. Have been worked on, and kind of see how you can implement it. What you

would change. But you have the building blocks there" (Participant 1, interview, December 2018). Participants were not only allowed access to media literacy lessons that featured finished student examples and overall assignment descriptions, but they were also provided with assignment sheets with step-by-step directions for students, easily adaptable curriculum materials, and accompanying rubrics for assessment. Participants stated, "I liked the storyboard templates and rubrics" (Participant, exit ticket, November 2018) and "I have learned further ways to incorporate my normal assessments using technology" (Participant, interview, December 2018). Participants in PLC meetings were presented with both authentic examples of how media literacy could be implemented for instruction and all the necessary tools to aid in implementation.

Overall, the process themes that emerged from the intervention focused on participant-identified barriers including time constraints to participating in the PLC, comfort level with media literacy, and competency to impart these skills to students. However, themes that emerged to support the acquisition of media literacy skills for participants included opportunities for collaboration and specific examples to provide direction for implementation and reduce cognitive load (Ayres & Paas, 2012). Even though the intervention included a few changes, it was implemented with fidelity. While barriers present may have helped to explain a lower level of participant engagement, the supports facilitated quality interactions when the participants were together. As research indicates, time and attendance were issues for the intervention, but the time that participants did spend together in collaboration was of high quality.

With the process outcomes in mind, the discussion turns to an examination of important outcome measures. Competence with media literacy involves not only teachers

building confidence during their time in the PLC, but also increasing their abilities to impart media literacy skills to learners.

Teacher Competency with Media Literacy

Research question four asked to what extent a PLC on media literacy improved teacher competency. Evidence to address this question included field notes related to each PLC meeting and pre-and post-test Competencies in Media Literacy survey data (Simons, Meeus, & T'Sas, 2017) The survey measured teacher media literacy competencies as well as "competencies they are expected to foster among their students" and utilized a 5-point Likert scale ranging from 1-*strongly disagree* to 5-*strongly agree*.(Simons et al., 2017, p. 102). Results include qualitatively coded notes and descriptive statistics from the survey that, together, illustrate participant changes in competency reflected in the themes of media creation, media communication, media participation, participant awareness, and media evaluation. Data collected from The Personal Digital Inquiry (PDI) framework worksheet completed during the intervention also provided evidence of competency as participants were able to work together to design a project for media literacy and integrate many of the lessons learned throughout the intervention. As research suggests "active participation through teamwork and collaboration" (Hobbs, 2017a, p. 17) is necessary to support competency in understanding media messages and purpose.

Media Creation

Media creation is defined as a teacher's ability to create and present media content to others and also feel competent in helping learners create and present media content (Simons et al., 2017). Pre-survey results from question 11 of the survey suggested that four of the six participants reported agreement that they could competently

communicate and present contents using media with only two participants who disagreed that they had this competency. After the intervention six out of the seven participants agreed they could competently communicate and present contents using media. (see Table 11). This reported increase in competency may be attributed to time spent in the PLC that focused on supporting participants to consider media literacy and its implementation in their classrooms. Participants were provided with examples of media literacy lessons, but then prompted to engage in hands-on activities and discussions to further their knowledge and competence.

Table 11

Media Creation Pre- and Post- Survey Results

	Pre-Test (*n*=6)			Post-Test (*n*=6)	
	Disagree	Slightly Agree	Strongly Agree	Slightly Agree	Strongly Agree
Question 11: I can communicate and present contents using media (e.g.) structure and adapt a presentation, publish media content through appropriate channel (such as blogs, directories, YouTube)	33% (*2*)	16% (*1*)	50% (*3*)	50% (*3*)	50% (*3*)

The qualitative evidence supports the results in Table 11 and illustrates how members of the PLC gained skills and improved their media literacy skills to support media creation. Participant Four stated that she had provided students with the option to use iMovie for a project regarding *Odysseus*. iMovie was not required for all students to use, but she said that when assisting those who decided to take part in this option she felt much more competent due to her participation in the last PLC meeting (Participant 4, personal communication, November 2018). Participant Six also described her ability to

interweave documentary film with the instruction of *The Autobiography of Malcolm X* by Alex Haley. Based on information from PLC meeting two, Participant Six reported that she felt confident in her ability to provide clips from the documentary *Not Your Negro* to compare the perspective of Malcolm X with James Baldwin. She said that through the inclusion of documentary film, students were more engaged in thoughtful discussions that challenged them to think critically.

Media Communication

Media communication refers to a teacher's personal ability to communicate using media to include social media and other online platforms. Media communication also includes a teacher's ability to communicate with students through media using a computer, tablet, Smartphone, or SMART board (Simons et al., 2017). The teacher feels competent in helping learners communicate and present content using media (Simons et al., 2017). Pre-survey results (see Table 12) from question one of the media competency survey suggested that all participants reported agreement that they could use media devices in a technical sense to include a computer projector, tablet, Smartphone, and interactive whiteboard. Additionally, in response to survey question two, all participants agreed that they could consciously choose between different media devices (e.g., computer, tablet, Smartphones, SMART board) based on their function and navigate through hyperlinks. As evident in Table 12, there were minor differences in post-test responses for questions one and two. Interestingly, one participant did report lower competency for question one, but this may be related to questioning confidence in regard to the acquisition of new information and skills. In terms of question two, it seems that

most participants agreed that they had this competency and the PLC may have built on this foundation as five participants rather than three strongly agreed.

Table 12

Media Communication Pre-and Post- Survey Results

	Pre-test (*n*=6)		Post-test (*n*=6)		
	Slightly Agree	Strongly Agree	Slightly Disagree	Slightly Agree	Strongly Agree
Question 1: I can use media devices in a technical sense (e.g. computer projector, projector, tablets, Smartphone, interactive whiteboard)	50% (*3*)	50% (*3*)	16% (*1*)	16% (*1*)	66% (*4*)
Question 2: I can consciously choose between different media devices, based on their function (e.g. computer, Smartphone, or tablet, navigate through hyperlinks)	Slightly Agree 50% (*3*)	Strongly Agree 50%(*3*)	Slightly Disagree 16% (*1*)	Strongly Agree 83% (*5*)	

With little differences in pre- and post- survey scores, the qualitative data offered more insights into participant competencies. Using media as a way to engage students in discussions became a focal point for participants. Teachers worked with their dyad partners to answer the question "What are 2-3 learning challenges in existing classroom projects that the use of media literacy might support?" (Coiro & Hobbs, 2017). Participants Three and Five reflected on students' abilities to communicate with each other and with the teacher stating that "all classes are not at the same level of understanding and/or interest; adding a media component may bring in those who are less engaged" (Participants 3 and 5, personal communication, November 2018). Based on this problem and possible solution, participants discussed ways that online platforms such as

Padlet, Voki, and Google Classroom could engage students to understand and promote engagement.

Participant Four discussed her use of the online platform Padlet as a way for students to use media to communicate with each other and flesh out ideas. She stated that she projected a Padlet on her SMART board and students posted example sentences for vocabulary they were using in class. She said that it was an opportunity for quieter students to share their ideas and students seemed engaged when using the medium. Participant Four also stated that she implemented Padlet in the classroom as a platform to discuss a news article from The Washington Post entitled "Love at First Sight May Have a Biological Basis" (Schwecherl, 2013). Students read the article and then used Padlet to post their comments and engage in discussion regarding its authentic application towards their current reading of *Romeo and Juliet*. While participants felt competent in using educational media platforms and authentic new sources to engage students in discussion and increase levels of communication, participation using social media did not change.

Media Participation

Media participation includes teachers who actively engage in media to support certain organizations or political establishments and feel competent in showing learners how they can also participate in a public forum for social or political reasons (Simons et al., 2017). Out of all the competencies for media literacy, participants showed the least change in this area. Pre- and post- survey data were similar for questions 12 and 24 respectively (see Table 13) throughout the intervention with five out of the six participants feeling competent to participate in the public debate specifically using social media with only one participant in disagreement and four out of six participants agreeing

they felt competent helping learners participate in the public debate using social media, with two participants in disagreement.

Table 13

Media Participation Pre- and Post- Survey Results

	Pre-test (*n*=6)			Post-test (*n*=6)			
	Slightly Disagree	Slightly Agree	Strongly Agree	Slightly Disagree	Slightly Agree	Strongly Agree	Disagree
Question 12: I can participate in the public debate through media (e.g. show commitment using (social) media, contact organizations by email, reader reactions and social media)	16% (*1*)	66% (*4*)	16% (*1*)	16% (*1*)	16% (*1*)	66% (*4*)	__
Question 24: Learners can participate in the public debate through media (e.g. show commitment using (social) media, contact organizations by email, reader reactions and social media)	16% (*1*)	66% (*4*)	16% (*1*)	16% (*1*)	50% (*3*)	16% (*1*)	16% (1)

The qualitative data provided a different perspective because even though teachers indicated competence in the survey data, there was no evidence of instructional implementation for media participation. For example, during one PLC meeting, participants engaged in a lesson that focused on how Twitter could be used in the classroom to assess the credibility of messages regarding political candidates. While teachers were engaged in the lesson, an overwhelming concern was filtering questionable information for students posted on social media and also potential pushback from parents

who did not want their children to have access to Twitter. Even though the ITC was able to show teachers how to use the moments tool and Twitter deck to filter information, participants never mentioned in future meetings the implementation of Twitter in the classroom or whether they had engaged students to participate in a public forum. Exit ticket responses were positive as one participant remarked that this new information influenced instructional practice as, “Recognizing that quotes and responses of public figures in response to their opponent's views should be reviewed. We may align toward one side in the political spectrum but shouldn't allow this preference to lessen our critical thinking skills in evaluating sources” (Participant, exit ticket, October 2018). However, Participant Three verbally communicated that “Twitter was not a world she wanted to be a part of” and that instead of going home to tweet she would instead be using her typewriter (Participant 3, personal communication, October 2018). The use of social media for teaching was an issue of consternation that was most evident regarding the use of Twitter in the classroom. As previously mentioned, participants reported concerns regarding the filtering of social media outlets for students and the ability to implement lessons using this medium. Even though teachers may have felt competent to participate and help learners participate in a public forum, competency may not have been enough to support implementation. Instead, teachers may have perceived instruction to support media participation in a public forum as too much of a potential risk in regard to parental push back. Additionally, participants may have had varied definitions for “public forum” and did not consider social media as exclusive to this definition. The idea of a public forum for participants could have been inclusive of other media outlets, besides social media, not addressed in the PLC activities.

Participant Awareness

Participant awareness suggests that teachers are knowledgeable about how media messages are tailored to fit certain audiences and how media production works and includes facets of democracy (Simons et al., 2017). Pre-survey results from question five of the media competency survey suggested that four of six participants did not feel competent in their knowledge of how media production and distribution worked to include the filtering of news and the intersection between politics, media, and democracy (see Table 14). Additionally, in response to survey question 17, five of six participants did not feel competent helping learners to understand how media production and distribution work. Post-survey results illustrated that while one participant still did not feel competent in understanding media production and distribution, the remaining five participants indicated a feeling of competence. However, post-survey results indicated that four of the six participants still did not feel competent helping learners know more about media production and distribution.

Table 14

Participant Awareness Pre-and Post- Survey Results

	Pre-test (*n*=6)			Post-test (*n*=6)			
	Disagree	Slightly Disagree	Strongly Agree	Disagree	Slightly Disagree	Slightly Agree	Strongly Agree
Question 5: I know how media production and distribution work (e.g. from source to article, the filtering of news, the intersection between politics, media, and democracy)	16% (*1*)	50% (*3*)	33% (*2*)	16% (*1*)	—	33% (*2*)	50% (*3*)
Question 17: Learners know how media production and distribution work (e.g. from source to article, the filtering of news, the intersection between politics, media, and democracy)	50% (*3*)	33% (*2*)	16% (*1*)	50% (*3*)	16% (*1*)	16% (*1*)	16% (*1*)

The survey results showed that participants improved their competency during the intervention and the qualitative data supports this change. Participants were presented with how advertisements, both in print and on television, could provide opportunities for students to understand the persuasive techniques of ethos, pathos, and logos. Additionally, participants were introduced to documentary film and how it could be used as a tool to engage students in a discussion that relates literature to authentic events in today's society. Participants were able to view a list of documentaries with linked descriptions and trailers and discuss how their current content area could be made more engaging through the use of film. During this time, Participant Five discussed using parts of the documentary series *O.J.: Made in America* with students to discuss the theme of identity and Participant Four discussed using the documentary *Up* as a way to have

students discuss identity regarding *The Illiad*. She stated that students could view the documentary and then discuss how each person changed over time, incorporating not only changes in identity but also elements of fate and free will. Participants were positive in their exit ticket responses to the use of advertisements and film in supporting media literacy, stating, “Enjoyed the resources about top documentaries. I can see how I can connect the documentaries to my course content” (Participant, exit ticket, October 2018) and “I learned how to use documentaries to teach ethos, pathos, and logos” (Participant, exit ticket, October 2018).

Participant responses from exit tickets indicated that many had a basic awareness of digital tools; however, the PLC meetings provided time to see specific examples of media literacy integration and opportunities for collaboration, “Today's session was informative in various ways. Learning how to use Twitter effectively in my instruction will certainly help me onward. In addition, I found the discussions that occurred amongst my group members was insightful as well” (Participant, exit ticket, October 2018). Participant responses also indicated that the PLC activities prompted reflection regarding current practices in the classroom and reflection on areas of improvement. As one participant suggested, “I have become jaded about the media and spend little time using it, personally. A good reminder that there are many good materials and resources out there” (Participant, exit ticket, October 2018). Reflection on instructional practices and media literacy was further illustrated by another participant, stating, “I realized that I need to improve my own understanding of the different media tools. I learned how media can be used to further engage students and allow them to have some freedom in their thinking/learning” (Participant, exit ticket, October 2018). As evident, participants were

able to increase awareness of media literacy and examine ways that instruction could be re-designed to include its implementation. Additionally, participants were provided with curricular materials to support this instruction and aid students in their evaluation of media.

Media Evaluation

To measure competency for media evaluation, teachers demonstrate awareness of how to evaluate media for credibility, implicit versus explicit messages, purpose, audience, and message bias and feel competent helping learners to evaluate media for credibility, implicit versus explicit messages, purpose, audience, and message bias (Simons et al., 2017). Survey results indicated that there was almost no difference in agreement and disagreement between the pre- and post-test data for questions that reflected media evaluation.

Table 15

Media Evaluation Pre-and Post-Survey Results

	Pre-test (*n*=6)					Post-test (*n*=6)				
	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Strongly Agree	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Strongly Agree
Question 4: I know that media represent information in a selective way and know how to interpret media messages (e.g. implicit versus explicit media language, the structure of a text/article/ film/ video)	—	—	—	83% (*5*)	16% (*1*)	—	—	—	33% (*2*)	66% (*4*)
Question 16: Learners know that media represent information in a selective way and know how to interpret media messages (e.g. implicit versus explicit media language, the structure of a text/article/ film/ video)	—	16% (*1*)	16% (*1*)	50% (*3*)	16% (*1*)	—	—	33% (*2*)	50% (*3*)	16% (*1*)
Question 7: I can evaluate media content taking into account various criteria (e.g. accuracy of information, comparison of information, appreciation of aesthetic aspects)	—	33% (*2*)	33% (*2*)	16% (*1*)	16% (*1*)	—	16% (*1*)	50% (*3*)	16% (*1*)	16% (*1*)

	Pre-test (*n*=6)					Post-test (*n*=6)				
Question 19: Learners can evaluate media content taking into account various criteria (e.g. accuracy of information, comparison of information, appreciation of aesthetic aspects)	—	33% (*2*)	33% (*2*)	16% (*1*)	16% (*1*)	—	16% (*1*)	—	16% (*1*)	16% (*1*)

Even though survey data did not reflect significant differences between pre- and post-test reporting of competency for media evaluation, qualitative data indicated that activities implemented in the PLC increased participant competency to evaluate media and help learners evaluate media. Teachers were asked to analyze advertisements and documentaries in terms of credibility, message, and purpose. To support their learning and contribute to increased media competency, teachers received supplemental evaluative materials from the book *Reading in the Reel World* (Golden & Constanzo, 2006) to aid in their classroom presentation of advertisements and documentaries. Research suggests that if teachers lack competence regarding how to implement media literacy, this may lead to implementation of fewer recommended activities to support it (Hobbs, 2016, 2017; Tiede & Grafe, 2016). Participants were presented with evaluative materials such as the acronym SOAPStone (see Figure 6) to help students process media messages, and a series of discussion prompts focused on ethics for the documentaries featured at the PLC meeting (see Figure 7).

Subject	How can you paraphrase the text in a sentence or two?
Occasion	What are the larger historical issues that inform this piece as well as the immediate need to speak at this particular time?
Audience	To whom is this piece directed? How do you know?
Purpose	What is the point or the message of this piece?
Speaker	Who is the speaker? What can you say about the speaker's age, situation, social class, etc?
Tone:	What is the attitude of the speaker to the subject? What words and phrases reveal this?

Figure 6. SOAPStone

Ethics in film

Ethical or not?

1. *Bowling for Columbine- (2002) Michael Moore*-Charlton Heston-theatrical? False pretenses? Fair to Heston?
2. *Hoop Dreams-(1994) Steve James*-Drug deal with dad-Should this be kept? Is this ethical?
3. *Bowling for Columbine-(2002)*-Michael Moore-Mentally unstable brother of Oklahoma City bomber, Terry Nichols-Is this ethical practice as a filmmaker? Sensationalism or art?
4. *Born into Brothels: Calcutta's Red Light Kids (2004)-Zana Briski*—place of filmmaker—place of child with camera?
5. *The True Meaning of Pictures: Shelby Lee Adams' Appalachia (2002)*-Exploitation of poverty? Appalachian people?

Figure 7. Student discussion prompts for documentaries

Participant Four noted that she found SOAPStone to be effective as a resource when discussing *The Illiad* and the subject of heroes with students. Additionally, she also

mentioned using media resources from Newsela and utilizing SOAPstone enabling students to "drill down," in regard to evaluation of sources (Participant, 4, exit interview, December 2018). Another participant stated in an exit ticket from meeting two, "I will use the SOAPStone method for some of my senior lessons/units." By the end of PLC meeting four, participants had been introduced to many instructional techniques that could influence their evaluative competency with media literacy. However, to assess the PLC's competency in designing a media literacy project, the personal digital inquiry (PDI) framework worksheet was used during meetings five and six.

Designing a Media Literacy Project

The intervention concluded with participants designing a media literacy project to illustrate competencies acquired during the intervention. Participants had been provided with guidance and scaffolding regarding media literacy implementation throughout their time in PLC meetings, and this project provided opportunities to practice these skills and integrate ideas for instruction. Participants Three, Five, and Six began work in session five on the personal digital inquiry (PDI) framework worksheet with assistance from me and the ITC. Participants One, Three, and Four were unable to participate but Participants Three and Four eventually added feedback to the worksheets when they returned in session six. Consequently, participants worked on the PDI framework in a group rather than the originally proposed dyad structure. Participant Five volunteered his idea to use iMovie to create a music video featuring a modern-day interpretation of Shakespeare's play *Romeo and Juliet*. As the facilitator, I provided participants with the PDI worksheet, but did not coach them on their answers. As research suggests, time to facilitate collaboration and develop competence are both critical for contributing to instructional

choices (Clarke & Hollingsworth, 2002). Data from the study indicated that participant competence to develop a media literacy lesson using the PDI framework focused almost exclusively on facilitation and documentation of media but was not reflective of media creation.

When teachers in the PLC were discussing the media literacy project using the PDI framework, the need to hold students accountable and document their progress became more of a focus compared with the media literacy skills students would acquire. Each step of the PDI framework asked teachers to consider strategies to engage students with media literacy regarding experiences, content, texts, and tools, and also teaching and technology supports to include facilitation and documentation. However, participants did not fully consider the tenets of student engagement for media creation, but instead focused their attention almost exclusively on the teaching and technology supports, specifically documentation. Drexler (2014) stated that, "Teacher roles are impacted to the extent that they relinquish some intellectual and management authority while also working to gain familiarity with the technology" (p. 456). Participant discussions regarding media literacy and the PDI framework were not reflective of teachers relinquishing control, but actually increasing efforts to facilitate and document student work.

As the music video project would be a group endeavor for students, participants considered ways to document, support, and facilitate student wondering and discovery through teaching and technology supports. Participants discussed the importance of having a project manager to support accountability for the group and keep tabs on what was accomplished during class time. Additionally, entry tickets as a way for students to

set their intentions regarding areas that they wanted to know more about and exit tickets regarding what they learned would support the teacher in assessing how much students were learning regarding media literacy and where there were possible deficits. Moreover, even though participants recognized reflection as an important part of engagement for a media literacy project, facilitation and documentation again became the focus. Participant Five discussed how a social media platform might be used to facilitate student comments about each other's videos regarding themes presented. Participant Four commented that the use of Survey Monkey might be beneficial as it would allow students to reflect on their experiences participating in the project, and then the teacher could compile student data anonymously and share with the class. The ITC also included the use of a Google Doc with questions students could reflect on during the project regarding what was working, where there were issues, and what students would do differently.

As previously stated, student engagement for media creation was not a focus for participants in regard to how students would express their interests and new perspectives to change their learning environment. Participant Five did possess an adequate understanding of how students would identify themes in *Romeo and Juliet*, compare the themes with modern-day music videos, and be accountable for work towards the music video creation. However, student engagement through the use of experiences, context, text, and tools to deepen student thinking were not as detailed.

These results of participant focus on facilitation and documentation as opposed to student experience and media creation for media literacy could be attributed to a variety of factors. Participants' acquired media literacy competencies during the intervention and assimilated to new information and skills to support media literacy projects appropriate

for classroom instruction. If teachers focused more on facilitation and documentation of a media literacy project it could be reflective of teachers who were unsure of their newly acquired skills and perhaps subconsciously perceived media literacy to still be outside their realm of pedagogical knowledge, and possibly a threat to classroom management. Needs assessment data indicated that control of technology, or lack thereof, was a concern for teachers at Appleton High School, and if teachers focused on facilitation and documentation it could be reflective of a need to control the implementation of media literacy as opposed to creating with it.

The integration of media literacy requires more than just competencies, and research suggests that beliefs and attitudes contribute to these decisions (Girvan, Conneely, & Tangney, 2016; Schmidt, 2012). In the following section, participant responses during exit interviews illustrate a positive attitude or willingness to implement media literacy in the classroom, beliefs regarding implementation, teacher comfort level, and perception of student needs and competency.

Changes in the Attitudes and Beliefs of Teachers Towards Media Literacy

The fifth research question focused on the extent to which the PLC on media literacy changed the personal attitudes and beliefs of teachers, their beliefs about students and media literacy, and/or their willingness to implement media literacy for instruction. Pre-survey data was compared with post-survey data from The Digital Learning Horoscope Questionnaire (The Media Education Lab, 2013). The survey did not show significant changes pre-and post-regarding participant attitudes and beliefs or willingness to implement media literacy. However, themes that emerged from the qualitative data

analysis included a change in attitude towards the implementation of media literacy and affirmation of beliefs regarding students and media literacy.

Participants attributed positive change in attitudes about media literacy to their participation in the PLC. For example, Participant Three stated that at the beginning of the intervention her attitude towards learning about media literacy was "hostile" (Participant 3, interview, December 2018). According to this individual, these feelings stemmed from prior experiences with professional development where "media has been provided without enough training," resulting in hostility and resentment (Participant 3, interview, December 2018). However, Participant Three started to change her attitude through opportunities to share ideas with colleagues and observe different teaching practices and perspectives. She stated, "I'm not classroom teaching presently. But it actually made me kind of sorry I wasn't because there were some things that I really felt excited about. My attitude changed a lot. I feel much more positive about it" (Participant 3, interview, December 2018).

Participants also reported excitement and interest for trying media literacy strategies as a result of engaging with tools and strategy that shifted their thinking from media literacy as an idea to the reality of instructional implementation. Participant Four perceived inclusion in the PLC as a way to consider new approaches to teaching media literacy, stating:

> I was thinking about using a PSA for themes with Romeo and Juliet coming up. Pretty much every class, our PLC that we had, I was like, 'Oh. I can put this in. It's a useful thing. Why not try it?' I felt really comfortable and excited about trying new stuff out. (Participant 4, interview, December 2018)

Participants also reported that before the intervention they recognized the importance of media literacy for students but felt overwhelmed with the volume of available information and confused about how to best integrate media literacy strategies. Participant Four reflected on this confusion, stating:

> I was open to using media literacy in my classroom. I felt like when I was looking at my overall curriculum, I wasn't sure exactly where to fit it in, as a separate unit or was it something I could integrate into the canon that we're supposed to use for each grade level? I wanted to use it, but I felt like I wasn't being efficient about how I was planning for it. (Participant 4, interview, December 2018)

During the PLC, participants developed an attitude that media literacy integration was attainable for instruction and that its integration could align with common core standards. Participant Five stated that in the beginning of the intervention he felt unsure of how he could implement media literacy strategies and while also establishing rigor in the classroom, but through learning about media literacy instruction, he developed the attitude that "you can keep the same rigor and use it [media literacy] for assessments and combine both" (Participant 5, interview, December 2018). As evident, data suggested that participation in the PLC increased positive attitudes among participants. Participants were not solely presented with information regarding media literacy but were provided with strategies for implementation, and indicated that they no longer felt resentful, overwhelmed, or confused and were excited about the opportunities and empowered to try new techniques (Participant 3, interview, December 2018; Participant 4, interview, December 2018; Participant 5, interview, December 2018). Research suggests that the inclusion of instruction that promotes student awareness and transfer depends directly on

teachers' beliefs regarding the influence of media and technology on student learning and achievement (Ertmer, 2005). Beliefs and attitudes towards student use of technology changed as participants realized that dexterity was not synonymous with being media literate, and the inclusion of instruction to promote media literacy was dependent on teachers to guide students and provide learning opportunities that moved beyond traditional instructional practices.

Participants reported that, prior to this interview, they believed students, with their continual use of technology, would be dexterous with using media. However, as participants learned how to identify media literacy and implement it in the classroom, they noticed students did not always have these media skills. Participant Two noted that teachers could not just assume "that because they are digital natives that they really know what they're doing" (Participant 2, interview, December 2018). Participant Three also noticed the need to teach students media literacy and believed that students "develop bad habits before being taught how to use it [media] well and appropriately" (Participant 3, interview, December 2018). Participant Five also remarked that he believed that his responsibility to students as an educator in 2018 had changed due to his participation in the PLC and awareness of media literacy, stating, "This is definitely changing like what my responsibility is to these students, and what I need to do going forward. It's changed what teaching English looks like" (Participant 5, interview, December 2018). He also believed that media literacy had a way to replace traditional teaching practices and reach students who may be poor test takers:

> Some students are just naturally good test takers, and some kids aren't, and I don't think testing is the purest, it's a measure, but it's not the purest measure of what a

> student thinks or what they can do. But I think using media, 'cause everyone consumes the news as media in 2018 at least, I think including that in those summative assessments I think that would be good, because it would reach to the kids who, for whatever reason, testing is just not for them. (Participant 5, interview, December 2018)

Overall, teachers believed they had a responsibility to develop media literacy instruction that developed students as smarter consumers and critical thinkers (Participant 6, interview, December 2018). Another element of implementing media literacy is teacher self-efficacy with respect to media literacy. The following section illustrates changes in participant media literacy self-efficacy through the vicarious experiences, positive emotional responses, social learning opportunities with peers in the PLC, and evidence of mastery (Bandura, 1977; Vygotsky, 1978).

Increases in Teacher Self-Efficacy

The last research question focused on improvements in teacher self-efficacy with media literacy as a result of participating in a PLC. Research suggests that teachers with heightened levels of self-efficacy have increased enthusiasm and commitment to teaching and self-efficacy is a necessary component for media literacy as teachers need to feel "comfortable and confident in order to successfully include media literacy approaches, topics, and activities into their classrooms" (Tschannen-Moran, Hoy, & Hoy, 1998, p. 203). The twelve question self-efficacy survey (Gibson & Dembo, 1984) included two subscales of personal self-efficacy and teaching efficacy. Table 16 illustrates the pre-and post-scores for the subscales within self-efficacy

Table 16

Personal Teaching Efficacy and Teaching Efficacy Pre- and Post-Survey Results

	Mean *(SD)*	
	Pre	Post
Personal teaching efficacy	24.0 (*1.78*)	25.5 (*2.07*)
Teaching Efficacy	22.3 (*3.26*)	23.3 (*3.44*)

Overall, the survey data revealed no significant differences between pre-and post-test efficacy sub-scores. However, the qualitative data illustrated an increase in confidence and abilities to implement the intervention activities and lessons.

Vicarious Experiences and Positive Emotional Responses

As previously mentioned, the PLC included media literacy lessons with step-by-step directions for implementation. Participants received student resources and related rubrics to aid in evaluation and were able to view examples of media literacy projects completed by students. Participants reported some concern with how to assess a media literacy lesson. Participant One stated:

> I want the kids to make a movie, but I'm a little reluctant to have them make a movie. I think some of it, most of it's on my end. Like, coming up with a rubric. What I think would be a complicated rubric for a five-minute movie. (Participant 1, interview, December 2018)

Prior experiences with media literacy also contributed to feelings of uncertainty and reluctance. Participant Five indicated that he had experienced a parental backlash when he tried to implement a film project the year prior and experienced issues with

communicating learning objectives to students and assessing the overall project to warrant student and parent satisfaction. He stated, “The pushback was vicious, so I didn't want that to happen again” (Participant 5, personal communication, December 2018). The ITC responded to the concerns of Participant Five stating that assessment was a critical part of a media literacy project, “Assessment design...the lesson here is, how do you design a way to evaluate that both fits the purpose of what you're trying to do and is also fair to all of the students that you're working with” (ITC, personal commentary, December 2018). Participants noted the inclusion of assessment materials for media literacy projects as a support, and data suggested that they possibly provided more clarity and increased confidence regarding implementation. Participants positively responded to these models, stating, “I liked the storyboard templates and rubrics” (Participant, exit ticket, November 2018) and “I have learned further ways to incorporate my normal assessments using technology” (Participant, interview, December 2018). Participants were presented with both authentic models of how media literacy could be implemented for instruction and the necessary tools to aid in implementation. Even though the PLC meetings required participants to attend and participate, many of them appreciated professional development that focused on a particular area of interest like media literacy and provided materials that could be easily assimilated for instructional use. Moreover, participants stated that the ability to observe others engaging with media literacy and share ideas that resulted in positive feelings influenced the propensity for its use when designing instruction. Participant Three stated:

> It influenced my attitude a lot. Partly just with the information that was being presented and the ideas. But also just talking with my colleagues, and learning.

> And some of whom have very different styles than I do, and some that are more similar. But learning all of the different ways that they are using, or think about using media, and incorporating it into their lesson, and teaching it and learning it themselves. I actually got excited. (Participant 3, interview, December 2018)

Participants indicated that they had wanted to learn about media literacy and digital tools, but with the time constraints of teaching had not been able to teach themselves or find the resources to support instruction. Participant Four stated in regard to the intervention that it, "just gave me more tools to figure out what was available, and just gave me time and space that I wouldn't necessarily take on my own" (Participant 4, interview, December 2018) and "it was nice having this dedicated time. I was very interested in it [media literacy], but I wasn't making the time in my schedule" (Participant 4, interview, December 2018). These perceptions were further illustrated by Participant Five, stating:

> We're always on the fly, always attacking things, we don't necessarily have the time to do that. So, to kind of be in this space where I can use an example of an idea that I'm thinking about doing in my own class and to go through the whole thing, it's exciting. I look forward to seeing how it works out. (Participant 5, interview, December 2018).

Due to the wide variation in each classroom, PLC meetings created an environment for participants to explore teaching models, compare learning contexts, and collaborate as they furthered their knowledge of media literacy.

Social Learning Opportunities to Foster Support and Relationship Building

Participants regarded relationships among teachers as vital for professional sustainability and morale. Participants noted in the initial focus group that teachers needed to be provided with opportunities to learn from each other and observe as a way to build support and relationships. Participant Five alluded to the mental-emotional component of teacher support that was vital for sustainability, stating:

> I think the biggest key for me is recognizing shared experiences that I wouldn't have recognized just walking into the door. Hearing about teachers in the building who are also kinda going through, like experiencing anxiety over planning, doubts as a teacher, or being too harsh to a student or trying to walk that fine line, work-life balance, all these different things are very real experiences as a teacher. But because once we walk into this building we kinda have to have our game face on. It's hard for me to tell who's going through those hoops, who's going through those experiences. I'm able to hear personal accounts and make those connections that way. That helps me. (Participant 5, personal communication, October 2018).

Participants discussed isolation as a factor related to teachers leaving the profession and reported that they did not see even fellow teachers on the same hall unless required to participate in a PLC meeting or a fire drill. Trust was noted as challenging to build with other teachers unless situations required teachers to collaborate and understand each other as both people and professionals.

Data collected from PLC exit tickets and the final interview suggested that participants appreciated the peer collaboration within the PLC and believed these connections contributed to their learning about media literacy. Teachers were able to

collaborate and share their ideas, and possible trepidation, regarding media literacy. Participant Three noted a lack of formal training provided within the school, and supported the idea of peer-to-peer learning, stating:

> I think that because there is just never enough training. There are people who learn things on their own, and figure things out. And I think there's great opportunity for teaching each other things that we're not necessarily being taught when we're being provided with devices, and with programs, and things like that. I think teacher to teacher, or educator to educator, peer-to-peer, learning is really important. (Participant 3, interview, December 2018).

Overall, no teachers within the PLC, except for Participant Two, stated that they had received training for media literacy before the intervention. Participant Five who completed graduate school only two years ago stated that media literacy was not a part of his training and "it was all just like lesson plans, and YA [young adult], and writing techniques, and different strategies like scaffolding, and all that stuff, but it was kind of like a traditional approach to teaching" (Participant 5, interview, December 2018). In the absence of formal training regarding media literacy and digital tools, Participant One perceived learning from others as a critical component to teacher learning, stating, "To see what other people have done is definitely inspiring" (Participant 1, interview, December 2018). Collaboration that influenced motivation to learn and try new strategies was also mentioned by Participant Three as she felt that people working together had the potential to evoke creativity and excitement for learning, stating:

> I kind of had the attitude that in the position that I'm in, and being close to retirement, I didn't really need to learn about it [media literacy] or get excited

about it. But I think through other people's excitement, and building on other people's ideas…I definitely got ideas as people suggested things. I felt inspired to add ideas, and to get excited about it. Like there's somebody's project I would even like to work on now. (Participant 3, interview, December 2018)

Participant collaboration resulted from trust and building relationships to learn as a group. To be part of this study, participants randomly responded to either my initial announcement at the first English department meeting in August or to an email request. Therefore, there was no way I was able to ensure that the dynamic of the group would be conducive to PLC members collaborating and building trusting relationships with each other. However, participants noted that the dynamic of the PLC made people feel welcome and trusting of others thus increasing the likelihood of participation. In reflecting on the dynamic of the PLC, there were no activities facilitated that were specifically focused on building trust among participants. However, I was aware of the social dynamic of a PLC and asked participants to arrive before the official start time of each meeting to enjoy food and visit with each other. Most participants arrived early to the meetings to eat and socialize with others in the PLC, and informal opportunities to socialize seemed to positively influence collaboration during the meetings.

Different levels of knowledge regarding media literacy and digital tools were suggested as a point of anxiety for Participants Four and Six. However, their experiences in the PLC allowed for collaboration, engagement, and trust with peers to lessen the threat of intimidation. Participant Four explained:

I feel really comfortable in this group. I guess you had folks that were coming in with different levels of being comfortable using technology. I think it was a matter

> of building the trust in the group where it's okay to say, 'I have no idea how to do that.' I think just...again, I think you did a nice job building the trust. (Participant 4, interview, December 2018)

The level of comfort and trust within the PLC was also discussed by Participant Six, stating:

> I think sometimes when you maybe go to trainings or if you're just talking to someone who uses it [media literacy] a lot, it could be intimidating. This was a way for everybody to talk about fears or things that they are worried about or just go through their understanding together, so I think that was helpful. Even if everyone didn't try it out, you could hear back from other people. (Participant 6, interview, December 2018)

Due to participation in the PLC, some participants remarked that they were able to include media literacy into their current instructional practices. Opportunities for mastery, or satisfaction based on success in teaching, was evident in data collected from participants regarding integration of media literacy with students (Tschannen-Moran & Hoy, 2007).

Opportunities for Mastery

Interview data suggested that not all participants implemented media literacy in their classroom practices during their time in the PLC. Reasons for a lack of implementation included being in the middle or end of an instructional unit (Participant 5, interview, December 2018) to not having a typical classroom environment conducive to seeing students every day (Participant 2, personal communication, December 2018; Participant 3, personal communication, December 2018). However, all participants stated

that participation in the PLC introduced them to instruction using media literacy and increased their propensity to try out new techniques and consider new ideas in the future.

Only two participants were able to attest to media literacy implementation in their classrooms during the time of the study. Participant Four discussed her inclusion of media literacy instruction with students, stating:

> In looking at the pros and cons articles, we pulled back a little bit and looked at where the articles were coming from. When I was doing my heroes unit for *The Odyssey* with my ninth graders, I used a CNN site and did interview clips for every day heroes. I was looking for things that were currently out there that were in other formats other than just text. (Participant 4, interview, December 2018).

Participant Four had discussions using Newsela with students in the past but wanted to include a more interactive component using film clips. Participant Six also discussed her implementation of media literacy through student discussions using Google Classroom. Instead of students answering discussion questions on their own, she posted the questions to Google Classroom and required students to respond using the comment feature. She perceived that this discussion format would cultivate engagement and "provide some freedom" as opposed to more traditional ways of responding (Participant 6, interview, December 2018). Participant Six also stated that due to the online platform, students recognized the importance of writing for an audience, stating, "The students took more time in writing their responses and used more of their resources. I think on that end, in a good way, was knowing that not just me, but their peers were going to look at it, so they took more time. That was one of the big things" (Participant 6, interview, December 2018). While immediate implementation of media literacy to provide evidence of mastery

was not present for all participants, data suggested that awareness of new ideas planted the seeds of possibility for future instruction.

Limitations

Even with encouraging findings regarding fidelity of implementation and participant participation and experiences, this study did include several limitations that included sample size, length of study, and absence of a control group. Research suggests a maximum of six participants in a PLC (Dufour, Dufour, & Eaker, 2008). However, due to sporadic absenteeism of participants, the original implementation design for the study was shifted at times due to low numbers. Additionally, participants in the study were those who volunteered because they had an interest in media literacy and wanted to improve their professional practice. Teachers who did not choose to participate may be unaware of how to implement media literacy for instruction impacting student awareness and skills.

This study was conducted for three months from October to December and included approximately 11 hours of meeting time. Research indicates that time to facilitate collaboration and develop competence is critical for contributing to instructional choices (Clarke & Hollingsworth, 2002). However, even though participants reported increased awareness of media literacy based on their collaboration with others in the PLC, competence regarding implementing digital tools with students remained challenging. More time should have been allotted for teachers to review examples of the PDI framework as it would have provided more concrete examples of how to elaborate the framework regarding the wondering and discovering of students (Coiro & Hobbs, 2017).

Finally, this study did not include a control group which impacted its generalizability to secondary teachers learning about media literacy in other contexts. To increase the external validity, the PLC for media literacy would have been matched with a control group (Rossi, Lipsey, and Freeman, 2004)

Implications for Practice and Research

Even with limitations, this study revealed meaningful results that could be applied to the organization of PLCs for professional development, the role of the ITC, and teacher implementation of media literacy for instruction, and the role of PLCs in promoting the well-being of teachers.

As evident in this study, time for teachers to collaborate with each other and observe best practices positively influenced competency and feelings of efficacy. Research suggests that in many schools, isolation is prevalent and perpetuates ineffective pedagogy, less self-reflection, and an inability to exchange peer feedback (Kelly & Cherkowski, 2015). Time for reflection and collaboration is a necessary component to evoke change and growth in teachers as learners (Clarke & Hollingsworth, 2002). Over the past two years, professional development at Appleton High School has gravitated from large professional development opportunities to PLC meetings focused on specific teacher interests to develop collegiality and improved professional practice. As data from the study suggested, social learning was one of the most compelling factors influencing teacher adoption of media literacy. As these teachers were from different departments to include English, library services, and senior project, many of them had no prior relationships with each other, and the PLC because of its small size (n =6) was able to provide opportunities for collaboration to increase competency and self-efficacy.

Research indicates that change for teachers is linked to feelings of self-efficacy, autonomy, internal leadership, and professionalism (Coleman, 2011; Talbert, 2010). Therefore, schools should provide opportunities for teachers to engage in social learning to promote collaboration while also supporting their autonomy to choose areas of professional development that are meaningful and interesting.

Additionally, the role of the ITC should be expanded in schools to help teachers integrate technology and assist with technical issues and questions. This study included a retired ITC to assist PLC participants with technical questions regarding implementation of technology. Teachers were able to ask questions specific to their teaching contexts and receive individual guidance and assistance. However, the current ITC at Appleton High School is rarely available to help teachers implement technology for instruction as she is tasked with fixing both hardware and software issues of 1:1 devices for approximately 2,000 students and 177 teachers. If the most effective professional development regarding technology for teachers is directly relevant to their content area and instructional practice, then there is a need for more ITCs in every school to provide individualized support for teachers as they learn about and implement technology (Cohen & Hill, 2001; Tondeur, Coopert, & Newhouse, 2010). For ITCs to be instrumental in technology integration for classroom use to support media literacy they must form relationships with teachers to see how curriculum is designed and how technology can be beneficial for teaching and learning (Marcovitz, 1999).

Structure of PLC meetings as a factor to support the implementation of media literacy should also be considered. Teachers will attest to the abundance of curricular resources on media literacy available today, but these require time to read through and

implement (Hobbs, 2016, 2017a). As teachers in the study were learning about media literacy and its implementation, it was beneficial for them to be provided with ready-made lessons that could be implemented for instruction. Research suggests that if teachers feel uncertain about how to implement pedagogy, then they may implement fewer of the recommended activities to support media literacy (Hobbs, 2016, 2017a; Tiede & Grafe, 2016). Therefore, professional development to support media literacy should be instructionally designed to reduce cognitive load of the learner and promote opportunities for "unrestricted access and time to play" to positively impact technological knowledge and advancement (Ayres & Paas, 2012; Psiropoulos, et al., 2014, p. 214).

Finally, further research is needed to explore how PLCs could be developed to establish trust and support among teachers. While many school systems perceive PLCs as an avenue exclusively for student support, they could also be instrumental in providing teachers with time and space to discuss instructional challenges, traumatic events, and improve professional practice (Roeser, Skinner, Beers, & Jennings, 2012). The mental-emotional well-being of teachers is imperative to navigate stress and cope with the unpredictability of the school environment. Therefore, PLCs could provide opportunities for teachers to build relationships with each other to promote professional sustainability and emotional competence (Jennings, Frank, Snowberg, Coccia, & Greenberg, 2013).

Conclusion

This intervention has provided evidence that teacher change to adopt educational innovation such as media literacy is based on more than just lesson plans. Teachers need to be supported through opportunities for social learning, structured professional development, face-to-face meetings, and guided exploration (Ranieri et al., 2018).

Additionally, as study data suggested, teachers are also more inclined to include media literacy for instruction if they are provided with time to discuss ideas for implementation and view applicable examples.

Media literacy education has the potential to impact students in a variety of ways to include enhanced critical thinking, problem solving, and evaluation of informational sources for credibility (Hobbs, 2016). As students are susceptible to a multitude of media outlets on a daily basis, giving them the tools to navigate messages and make sense of information is vital (November, 2016). However, for students to acquire these media literacy skills, it is necessary to develop teacher competency and self-efficacy to provide instructional opportunities.

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Appendix A

Teacher Perceptions of MacBook Use for Instruction

Item	Participant statements
Q9: What are all the ways you use MacBooks in the classroom?	"Grammar instruction on everyday basis" (Participant 1). "Supportive websites for learning" (Participant 1). "Google Classroom for everyday notes, homework, and agenda" (Participant 1). "Small group remediation" (Participant 2). "PowerPoint notes, Quizlet, Kahoot" (Participant 2). "MacBooks help with organization and repetition" (Participant 2). "PowerPoints, SOL practice, Quizlet, BrainPop, individual quizzes, Google slides, Prezi" (Participant 4). "Google Docs, Google forms. I use Blackboard and Kahoot to engage in review activities. I also use scavenger hunts with google and self-directed websites" (Participant 5). "Seen excellent use of MacBooks to produce projects and presentations. Also with research, gathering and collecting data and samples. But it is hit or miss, is it critical thinking or clerical use? Need to think of technology not like a hammer, but like a paint brush" (Participant 6).
Q11: Since the incorporation of the MacBooks, how would you describe the changes in student collaboration?	"Collaboration is a combination of phones and MacBooks" (Participant 1). "Student collaboration—they don't have to be together physically to collaborate. They can all be working at the same time. Students use SKYPE and MacBooks to work from home if necessary" (Participant 2). "Equality—Collaboration increases accountability as kids work together on projects but not physically. There are issues with plagiarism" (Participant 3). "Students are less collaborative and communication has decreased with a loss of skills" (Participant 4). "Students are copying and sharing work" (Participant 5).

Item	Participant statements
Q12: Are there any problems within the classroom you have observed with the incorporation of the MacBooks?	"Cheating-students have 2 tabs open with different browsers" (Participant 1). "YouTube is a distraction. Cell phones have been replaced by MacBooks" (Participant 2). "Issues with updates, students not having device present, distracted by MacBooks, issues with passwords and destruction of device" (Participant 3). "Kids are acting more like idiots. Higher level skills have decreased as kids are not bettering skills in the way that they use technology. Technology dumbs down inquiry and analysis. Kids want instant gratification and they are less patient and put less time into being involved. They just want to take whatever pops up. Thinking is lost" (Participant 4). "Students easily lose focus and get off task" (Participant 5). "MacBooks are a distraction for learning. Classroom management issues. Computers are lost or if students do not have one teachers see it as a crisis" (Participant 6).

Appendix B

Teacher Perceptions of Support for Technology

Level of support	Participant statements
ITC	"Meeting with ITC are in lunch group-brown bag-tech education sessions" (Participant 1). "Hard to find time to see ITC with demands of the classroom" (Participant 1). "ITC is great for support, help, and maintenance" (Participant 3). "Close relationship with ITC" (Participant 5). "Hard to find time to see ITC with demands of the classroom" (Participant 1). "ITC focus was to help integrate technology into instruction, but instead working on physical and hardware computer problems" (Participant 6). "ITC should be doing workshops [for teachers] but have to help kids" (Participant 6). "ITCs need more PD in instructional aspects" (Participant 6).
Personal skill set	"Self-starter in reference to technology" (Participant 1). "If I need help I Google everything" (Participant 2). "Pretty self-taught, but I do not have time or feel like incorporating technology" (Participant 4). "Tech-savvy so able to trouble shoot if there is a problem" (Participant 5).
Teacher-to-teacher assistance	"Talk with other teachers to work something out" (Participant 6). "Teachers teaching teachers" (Participant 5). "County Festival of the Minds-teachers teaching teachers" (Participant 5).
Professional-development opportunities	"Attended Google Summit for educators. This was helpful but optional and not mandatory" (Participant 4). "I have attended and led professional development" (Participant 1). "ITCs are getting more professional development in instructional aspects. Things are done now that should have been done in the beginning. Now it is like trying to change the tires of a moving car" (Participant 6). "Not much and not enough at high school level and this is still true now. There is a lot of work at the elementary level. At our school we have the ITC, breakout sessions" (Participant 5).

Level of support	Participant statements
	"County needs to provide more technology resources. This will prevent teachers from hunting and pecking around" (Participant 4). "More professional development needed for teachers to get accustomed to using technology as an extension. Teachers need options for how to extend learning" (Participant 4).

Note. ITC = information technology coordinator.

Appendix C

Competencies in Media Literacy Survey

Items for Competencies in Media Literacy Survey[3]

5-point Likert Scale (1-Strongly disagree to 5-Strongly agree)

Personal Competencies

1) I can use media devices in a technical sense (e.g. computer projector, projector, tablets, smartphone, interactive whiteboard).

2) I can consciously choose between different media devices, based on their function (e.g. computer, smartphone, or tablet, navigate through hyperlinks).

3) I can purposefully use different sources of information and media devices (e.g. search for information using social network sites, the Internet).

4) I know that media represent information in a selective way and know how to interpret media messages (e.g. implicit versus explicit media language, the structure of a text/article/film/video…)

5) I know how media production and distribution work (e.g. from source to article, the filtering of news, the intersection between politics, media, and democracy).

6) I know how media content is tailored to the target audience (e.g. selection possibilities, personalized on-line offer through cookies, newspapers/television channels/ websites and their target audience).

7) I can evaluate media content taking into account various criteria (e.g. accuracy of information, comparison of information, appreciation of aesthetic aspects).

8) I am aware of the effects of media (e.g. influence on purchasing behavior, undesired effects such as hate or addiction).

9) I am aware of my own media behavior (e.g. copyright, illegal downloads, dangerous media behavior).

10) I can create media content (e.g. write an article, create a photo or video document, set up a blog).

11) I can communicate and present contents using media (e.g. structure and adapt a presentation, publish media content through an appropriate channel such as blogs, directories, YouTube).

12) I can participate in the public debate through media (e.g. show commitment using (social) media, contact organizations by email, reader reactions or social media).

Pedagogical-Didactical Competencies in the Field of Media Literacy

1) Learners can use media devices in a technical sense (e.g. computer projector, projector, tablets, smartphone, interactive whiteboard).

2) Learners can consciously choose between different media devices, based on their function (e.g. computer, smartphone, or tablet, navigate through hyperlinks).

3) Learners can purposefully use different sources of information and media devices (e.g. search for information using social network sites, the Internet).

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[3] From "Measuring Media Literacy for Media Education: Development of a Questionnaire for Teachers' Competencies," by M. Simons, W. Meeus, and J. T'Sas, 2017, *Journal of Media Literacy Education*, *9*, 99-115. Copyright 2017. Adapted with permission.

4) Learners know that media represent information in a selective way and know how to interpret media messages (e.g. implicit versus explicit media language, the structure of a text/article/film/video…)

5) Learners know how media production and distribution work (e.g. from source to article, the filtering of news, the intersection between politics, media, and democracy).

6) Learners know how media content is tailored to the target audience (e.g. selection possibilities, personalized on-line offer through cookies, newspapers/television channels/ websites and their target audience).

7) Learners can evaluate media content taking into account various criteria (e.g. accuracy of information, comparison of information, appreciation of aesthetic aspects).

8) Learners are aware of the effects of media (e.g. influence on purchasing behavior, undesired effects such as hate or addiction).

9) Learners are aware of my own media behavior (e.g. copyright, illegal downloads, dangerous media behavior).

10) Learners can create media content (e.g. write an article, create a photo or video document, set up a blog).

11) Learners can communicate and present contents using media (e.g. structure and adapt a presentation, publish media content through an appropriate channel such as blogs, directories, YouTube).

12) Learners can participate in the public debate through media (e.g. show commitment using (social) media, contact organizations by email, reader reactions or social media).

Appendix D

Self-Efficacy Survey

Adapted Version of the Teacher Efficacy Scale[4]
(Gibson & Dembo, 1984)

Please indicate the degree to which you agree or disagree with each statement by circling the appropriate numeral to the right of each statement.

1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = slightly agree, 5 = agree, 6 = strongly agree

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1.	When a student does better than usual utilizing media literacy, many times it is because I exerted a little extra effort.	1	2	3	4	5	6
2.	The hours in my class using media literacy have little influence on students compared to the influence of their home environment.	1	2	3	4	5	6
3.	When a student is having difficulty with an assignment related to media literacy, I am usually able to adjust to his her level.	1	2	3	4	5	6
4.	If students aren't disciplined at home to use media literacy, they aren't likely to accept any discipline.	1	2	3	4	5	6
5.	When I really try to integrate media literacy, I can get through to most difficult students.	1	2	3	4	5	6
6.	A teacher is very limited in what he/she can achieve	1	2	3	4	5	6

[4] From "Teacher Efficacy: A Construct Validation," by S. Gibson and M. H. Dembo, 1984, *Educational Psychology*, *76*(4), 569-582. Copyright 1984.

	integrating media literacy because a student's home environment is a large influence on her/his achievement.						
7.	If a student masters a new media literacy concept quickly, this might be because I knew the necessary steps in teaching that concept.	1	2	3	4	5	6
8.	If parents would do more with their children regarding media literacy, I could do more.	1	2	3	4	5	6
9.	If a student did not remember information I gave in a previous lesson regarding media literacy, I would know how to increase his/her retention in the next lesson.	1	2	3	4	5	6
10.	If a student in my class becomes disruptive and noisy, I feel assured that I know some media literacy techniques to engage him in the lesson quickly.	1	2	3	4	5	6
11.	The influences of a student's home experiences can be overcome by good teaching of media literacy.	1	2	3	4	5	6
12.	Even a teacher with good teaching abilities regarding media literacy may not reach many students.	1	2	3	4	5	6

Appendix E

Beliefs and Attitudes Survey

The Online Digital Learning Horoscope[5]

5-Point Likert Scale (1-Strongly disagree to 5-Strongly agree)

1. People are passive when they don't notice biases and points of view that are embedded in media messages
2. You can be misled by media when you don't know where the information comes from.
3. The real purpose of television is to sell audiences to advertisers.
4. I'm worried about how few companies control the publishing, broadcasting, film, and Internet business.
5. Citizens have an obligation to express themselves about causes they believe in.
6. We risk losing our democracy if we don't create a generation of activists who help preserve it.
7. Too often, media distracts students from information and ideas that are really important.
8. I worry that students' media use interferes with their concentration and motivation in school.
9. You won't be able to compete in the workplace unless your emails, writing, videos, and photos are polished and professional.
10. When students make amateur-looking media productions, it's hard to know whether they've learned anything.
11. When it comes to digital media, if you don't participate, you will be left behind.
12. Students who aren't active online are isolated from the rest of the world.
13. The most competitive schools of the future will invest in the right technology tools and help students learn to use them well.
14. If my school doesn't keep up with the technology trends, we will fall behind.
15. I worry that some media and technology may promote antisocial behavior.
16. If students don't share how they feel about media and popular culture, they miss out on opportunities for emotional growth.
17. If I don't give my students flexibility to be creative, they may not learn to speak for themselves.
18. To many people are disengaged from the process or learning and developing their unique knowledge and skills.
19. If I'm not familiar with students' popular culture, they will think that I'm not really connected to their lives.
20. It's not easy to connect with young people if I don't share an interest in their movies, music, fashion, and celebrities.

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[5] From "The Powerful Voices for Kids: Digital Learning Horoscope" by The Media Education Lab, 2013. Copyright 2013 by The Media Education Lab

21. Most of the messages on mainstream media like broadcast TV networks are a waste of time.

22. Too many people are ignorant about alternative media found in some magazines, music, and movies.

23. Students can be trapped by their own narrow interest in popular culture.

24. I worry about the complexity in contemporary popular culture.

25. When you know how a website, videogame, or TV show is actually made, it changes the way you see media forever.

26. Media producers make careful, conscious choices when they create movies, TV shows, and websites.

27. Combatting stereotypes in media is essential to improving people's well-being.

28. You can change someone's life by teaching them how to resist media messages.

29. It is essential for young people to use digital media in the classroom to advocate for social change.

30. When young people take social action through digital media, they can change the world.

31. The best thing about the Internet is the access to rich content, ideas, and information that I can use in the classroom.

32. Digital media makes it easier for students to interact with subject matter that some students find boring.

33. When students use the same tools that professionals use, they know that their voices are more likely to be heard.

34. When students work hard, they can create productions that look and sound as good as what you see in mainstream media like Hollywood or broadcast news.

35. When used to its fullest potential, social media can transform education.

36. The more we share online the more we contribute to society.

37. When students learn to master a new technology tool, they gain special knowledge and status.

38. Good educational technologies help teachers teach better.

39. Media helps students activate their feelings and emotions in the classroom to promote learning.

40. Using media in the classroom promotes empathy and social understanding.

41. When students really care about a topic, nothing can stop them from learning more.

42. Students' creativity is unleashed when they discover topics that compels their interests.

43. Keeping up with young people's culture puts me in touch with my students.

44. Young people's interest in popular culture can promote an interest in school subjects.

45. Alternative films and documentaries are more interesting and useful for my students than Hollywood movies.

46. Students' lives are enriched when they understand how and why the classics in various forms of media are relevant to present day issues.

47. Students' lives are enriched when they understand how and why the classics in various forms of media are relevant to present day issues.

48. Children should be given access to the rich cultural history provided by classics in film and literature.

Appendix F

Key Questions for Analyzing Media Messages

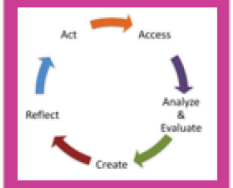
AUDIENCE & AUTHORSHIP	**AUTHORSHIP**	Who made this message?
	PURPOSE	Why was this made? Who is the target audience (and how do you know)?
	ECONOMICS	Who paid for this?
	IMPACT	Who might benefit from this message? Who might be harmed by it? Why might this message matter to me?
	RESPONSE	What kinds of actions might I take in response to this message?
MESSAGES & MEANINGS	**CONTENT**	What is this about (and what makes you think that)? What ideas, values, information, and/or points of view are overt? Implied? What is left out of this message that might be important to know?
	TECHNIQUES	What techniques are used? Why were those techniques used? How do they communicate the message?
	INTERPRETATIONS	How might different people understand this message differently? What is my interpretation of this and what do I learn about myself from my reaction or interpretation?
REPRESENTATIONS & REALITY	**CONTEXT**	When was this made? Where or how was it shared with the public?
	CREDIBILITY	Is this fact, opinion, or something else? How credible is this (and what makes you think that)? What are the sources of the information, ideas, or assertions?

From NAMLE's Core Principles for Media Literacy Education. Copyright 2007.

Appendix G

Personal Digital Inquiry Framework Worksheet

STEP 1. START WITH THE END IN MIND: OUTLINE KNOWLEDGE OUTCOMES AND DIGITAL COMPETENCIES YOUR PROJECT AIMS TO ACHIEVE	
LEARNING OUTCOMES TO DEEPEN KNOWLEDGE	*Identify **what learners will be expected to know, understand, and be able to do** during and after they engage with these activities. Aim for outcomes that involve higher levels of thinking and engagement (Optional): You may choose to also align these outcomes with relevant Virginia standards of learning (SOLs)* •
PARTICIPATORY OUTCOMES TO DEEPEN KNOWLEDGE	*Identify **ways that learners might have opportunities to turn their knowledge into action** by collaborating with others, starting conversations, raising awareness, taking action, and/or changing minds.* •

DIGITAL AND MEDIA LITERACY COMPETENCIES 	*What digital and media literacy competencies are central to these learning experiences? Copy/paste any three competencies from this list or write your own from the most relevant categories: (e.g., Access, Analyze, Create, Reflect, and Act)*
STEP 2. VISUALIZE SPECIFIC LEARNING EXPERIENCES ALIGNED TO THESE OUTCOMES AND WAYS YOU MIGHT FACILITATE OPPORTUNITIES FOR ALL FOUR SETS OF DIGITAL INQUIRY PRACTICES	

WONDER & DISCOVER	***ENGAGING STUDENT EXPERIENCES:*** *(What experiences, content, texts, and tools will learners engage with wondering and discovery to deepen thinking around outcomes?)* ***TEACHING AND TECHNOLOGY SUPPORTS:*** *(How will you support, facilitate, and document wondering and discovering?)*
COLLABORATE & DISCUSS	***ENGAGING STUDENT EXPERIENCES:*** *(What experiences, content, texts, and tools will learners engage with collaboration and discussion to deepen thinking around outcomes?)* ***TEACHING AND TECHNOLOGY SUPPORTS:*** *(How will you support, facilitate, and document collaboration and discussion?)*
CREATE & TAKE ACTION	***ENGAGING STUDENT EXPERIENCES:*** *(What experiences, content, texts, and tools will learners engage with creating and taking action to deepen thinking around outcomes?* ***TEACHING AND TECHNOLOGY SUPPORTS:*** *(How will you support, facilitate, and document creating and taking action?)*
ANALYZE & REFLECT	***ENGAGING STUDENT EXPERIENCES:*** *(What experiences, content, texts, and tools will learners engage with analysis and reflection to deepen thinking around outcomes?)* ***TEACHING AND TECHNOLOGY SUPPORTS:*** *(How will you support, facilitate, and document analysis and reflection?)*

From Coiro, J. & Hobbs, R. (2017). Personal digital inquiry (PDI) planning worksheet. Summer Institute in Digital Literacy 2017, University of Rhode Island, Providence, RI. Copyright 2017. Reprinted with permission.

Appendix H

Public Service Announcement Supplemental Materials

PSA Project:

Let's watch a few PSAs!

How does the PSA include the following?

- Actors portraying the message
- Persuasive techniques: Ethos, Pathos, Logos
- The use of voiceovers (if any)
- Text on the screen

PSA—Project

1. Think about what you want to say about your PSA to get others interested, and write up a script. What makes Appleton High School great? Why would someone want to go to this school?

Divide your script into parts to form a storyboard. Here's the script from the John's video as a sample:

Meet John, an ordinary boy, almost 16 years old.	Well, almost ordinary, a bit quirky; he eats pizza for almost every meal, and he has a pet rat.	But Jeremy's life is about to change- to become an amazing adventure when he
He receives a mysterious package with four different return address labels	Written on the package are the words: For John Cabre to pen on his 18th Birthday	Sounds tempting, but should he open it?
Join John and his best friend Iris as they begin a remarkable journey to find the sender and uncover this mystery		

PSAs should not run over 30 seconds! You need the following 3 aspects:

1) Intent-purpose
2) Music
3) Images to persuade---think Ethos, Pathos, Logos!

Appendix I

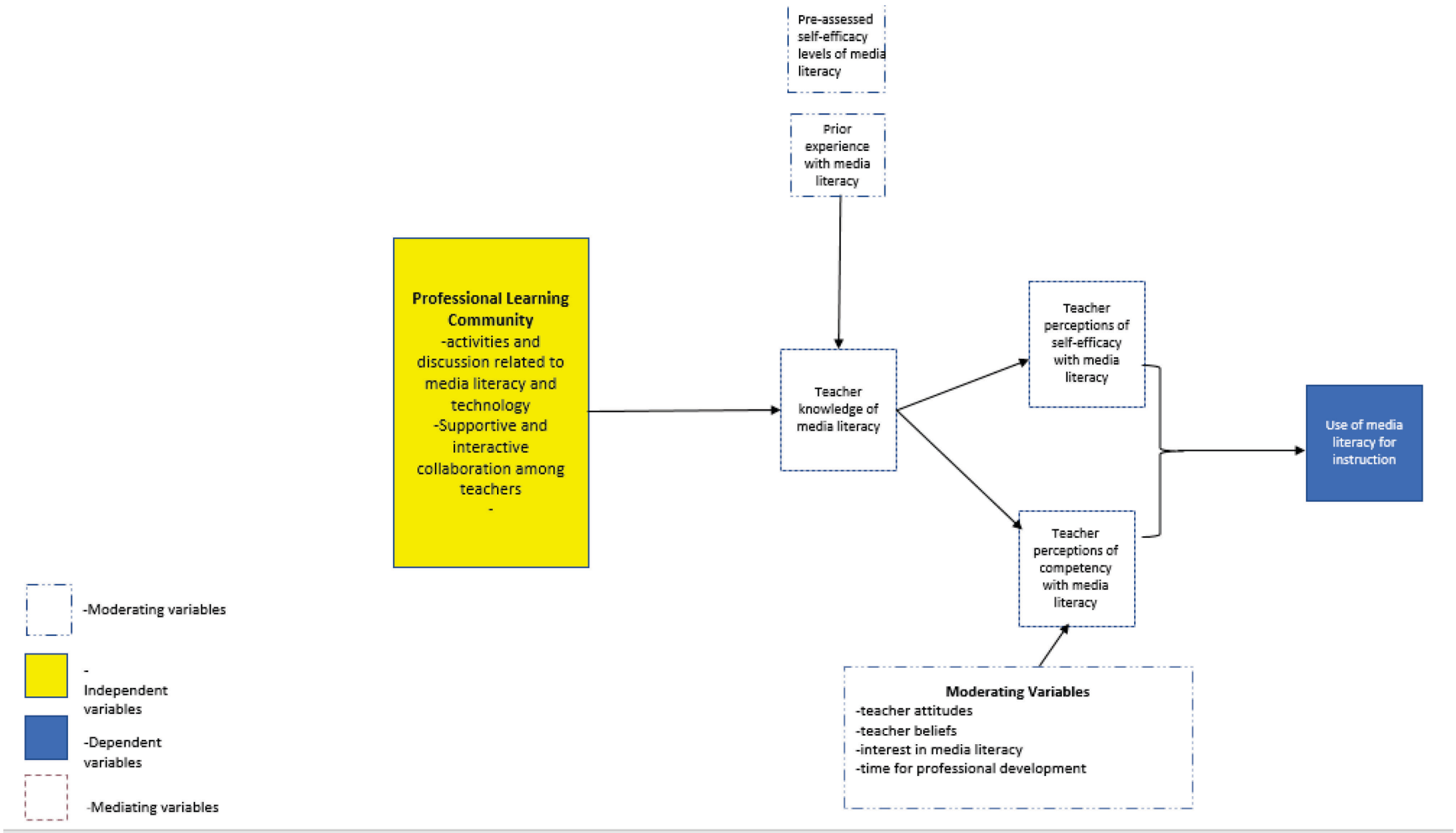
Public Service Announcement Rubric

Public Service Announcement Rubric

CATEGORY	4	3	2	1
Content	Students create an original, accurate and interesting PSA that adequately addresses the issue.	Students create an accurate PSA that adequately addresses the issue.	Students create an accurate PSA but it does not adequately address the issue.	The PSA is not accurate.
Fair Use	The PSA follows fair use for all music and sound effects that are included. All text is the original work of the group members or is used with permission.	The PSA follows fair use for most music and sound effects that are included. All text is the original work or is used with permission. There are some minor issues with copyright and fair use.	Most PSA is the original work of the group members, but some material is used without permission or in violation of copyright.	The PSA does not follow fair use practices. Text, sound effects and/or music is used without permission and/or in violation of copyright.
Collaboration with Peers	Almost always listens to, shares with, and supports the efforts of others in the group. Tries to keep people working well together.	Usually listens to, shares with, and supports the efforts of others in the group. Does not cause problems in the group.	Often listens to, shares with, and supports the efforts of others in the group but sometimes is not a good team member.	Rarely listens to, shares with, and supports the efforts of others in the group. Often is not a good team member.
Technical Production	Tone and voice convey emotions and enthusiasm. The recording is clear and loud enough to be heard. Background sounds and effects blend with the PSA's message.	Tone and voice frequently convey emotions and enthusiasm. The recording is clear and loud enough to be heard. Background sounds and effects usually blend with the PSA's message.	Tone and voice frequently convey emotions or enthusiasm. Most of the recording is clear and loud enough to be heard. Background sounds and effects sometimes distract from thee PSA's message.	Tone and voice rarely convey emotions or enthusiasm. Recording is unclear and/or not loud enough to be heard. Background sounds and effects absent or distract from the PSA's message.

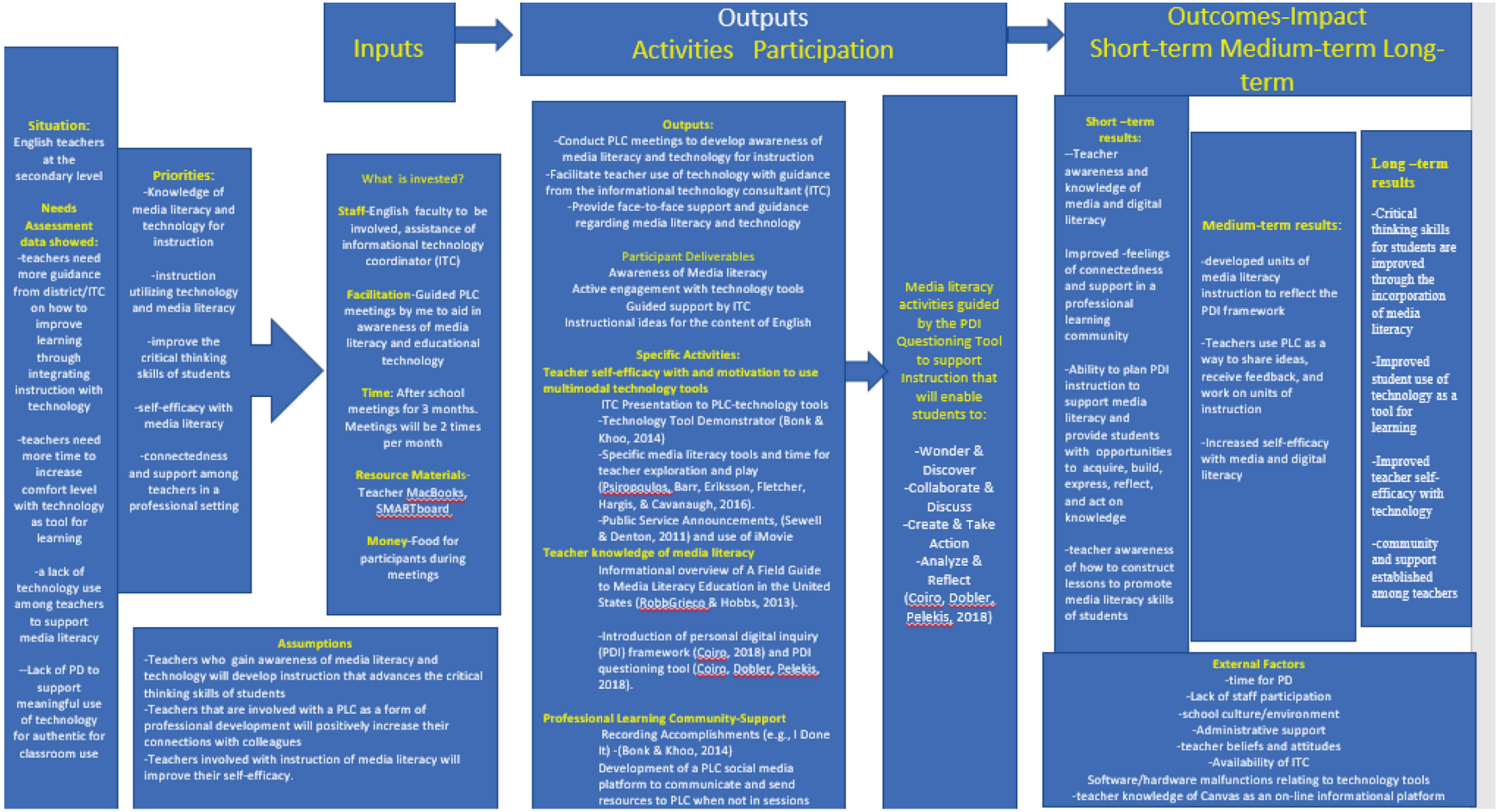
Appendix J

The Theory of Treatment



Appendix K

The Logic Model



Appendix L

Professional Learning Community Focus Group Questions

Introductory Script for the Focus Group

"Good afternoon and thank you for being a part of this focus group. This focus group will provide me with important data regarding your perceptions of a professional learning community (PLC) at this high school. As discussed at the department meeting and in the email, this session will be recorded and transcribed. Additionally, the data collected will be kept in a password protected computer that is only accessible by me as the researcher. The session should last approximately one hour, and we will discuss how PLCs influence collective learning and supportive conditions for teachers. Your honest responses are greatly appreciated. If no one has any questions, then let's begin our discussion today!"

Focus Group Questions

1. Collective learning:
    a. How often does the faculty come together to learn within their professional learning communities?
    b. Do you feel as though this is adequate time for teachers to learn and engage within the PLC?
    c. Do you feel as though people apply the information learned in the PLC to their instructional context?
    d. Do you feel as though participation in a PLC improves instructional practice?
    e. How is the information organized within a PLC? Do you feel there are designated leaders?
    f. What are ways the organization of information and leadership within a PLC could be improved?
    g. How could PLCs be organized to provide more opportunities for teacher learning?
2. Supportive conditions:
    a. Do PLCs promote teacher collaboration?
    b. Do PLCs improve teacher relationships?
    c. How could be PLCs be improved to provide more opportunities to strengthen teacher relationships?
    d. Do PLCs provide opportunities for teachers to provide each other with feedback regarding instructional practice?
    e. Do you think teacher relationships are perceived as valuable by the leadership at this school?
    f. Do you think teachers supporting each other makes a difference in instructional practice and morale?

Appendix M

Exit Ticket Prompt

Exit Ticket Prompt

Please describe any barriers or supports regarding the delivery of today's information. Thank you.

Barriers to learning:

Supports for learning:

Did you learn anything new today about media literacy that will influence your instructional practice for the future?

Appendix N

Interview Protocol

Interview questions: Meeting 6

Attitudes and beliefs/self-efficacy of teachers regarding media literacy instruction

(Thank you for agreeing to this interview today. I have some questions to ask you about self-efficacy with media literacy and your attitude and beliefs towards media literacy. What you tell me will be kept confidential and anonymous. I will record this conversation using my MacBook for accuracy in data collection. Your name will not be connected to this interview or any writing that I do for my dissertation.)

Start recording.

1.) How would you describe your initial attitudes and beliefs towards media literacy at the beginning of the intervention?

2.) Did participation in a PLC influence your attitudes and beliefs towards media literacy?

3.) How have your attitudes and beliefs regarding media literacy changed since participating in the intervention?

4.) Did you have a chance to use the strategies presented in the intervention on media literacy? Can you describe how you used the strategies in your classes?

5.) How did you use the strategies presented in the intervention regarding media literacy within your teaching context?

6.) Did you notice any changes in student behaviors, attitudes, or student work/assignments/grades after using some of the media literacy strategies? Can you

describe what those changes looked like or give any specific examples? What were the student outcomes regarding the implementation of media literacy for instruction?

7.) Has knowledge of media literacy education changed your approach to instruction? If so, what did you find most helpful and why?

8.) How has this intervention influenced the likelihood of using digital tools for instruction? Why do you think your likelihood of using these tools has changed? Any specific examples?

9.) What do you perceive as the strengths and weakness regarding a PLC to support and guide teachers when learning about and digital tools?

Appendix O

Observation Checklist

Observation Checklist for Teacher Competencies with Media Literacy

PLC meeting # _____

Date_____

Media Creation: Participant can create media content and present it to others. Participant feels competent helping learners create media content and present it to others.

Media Communication: Participant can communicate using media to include social media and other online platforms. Participant can use media to communicate with students through use of a computer, tablet, Smartphone, or SMARTboard. Participant feels competent helping learners communicate and present content using media.

Media Awareness: Participant is aware of how media messages are tailored to fit a certain audience. Participant is aware of how media production works and how media influences facets of democracy. Participant is aware of the effects of media to influence consumerism, addictive behaviors, etc. Participant feels competent helping learners understand media messages, media production, and media influence.

Media Evaluation: Participant is aware of how to evaluate media for credibility, implicit versus explicit messages, purpose, audience, and message bias. Participant feels competent helping students to evaluate media for credibility, implicit versus explicit messages, purpose, audience, and message bias.

Media Participation: Participant actively engages in media to support certain organizations or political establishments. Participant feels competent in showing learners how they participate in a public forum for social or political reasons.

Participant #	Competency	Notes	Observed behavior (s)	Notes

Curriculum Vitae

Margaret V.C. Murphy was born in 1981 in Boston, Massachusetts.

Margaret completed her Bachelor of Arts at Sweet Briar College in 2003 where she majored in English. During her undergraduate studies, she spent a semester studying journalism at American University and interned at the Smithsonian Institution Scholarly Press.

Margaret completed her master's degree in English education at Virginia Tech in 2006 and became certified to teach English in grades 7-12. She has taught English in the Virginia public school system for the past 12 years.

During her time as a teacher, Margaret acquired her Gifted and Talented endorsement from Drake University and was a fellow with the National Writing Project.

In 2016, she began her Ed.D. at Johns Hopkins University and was the recipient of a three-year merit scholarship.